

Close Out Documents

Pump House

Asbestos Abatement

Prepared for:

Kiewit Infrastructure Co.
Attn: Jenn Bradtmueller
160 Inverness Drive West, Suite 110
Englewood CO 80112

Contents:

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2. CDPHE Asbestos Abatement Courtesy Notice
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1. Closeout Letter

December 27, 2018

Kiewit Infrastructure Co.
160 Inverness Drive West, Suite 110
Englewood, CO 80112

Re: SSCR Pump House

Dear Kiewit Infrastructure Co.

This letter is confirm that all the work associated with the asbestos abatement of the Pump House is complete.

The scope of work included the removal of Trace Asbestos Containing OSHA Regulated Materials. Because the materials contained less than 1% asbestos, only a Courtesy Notice was required to act as a permit, and the waste was not required to be manifested. In addition, containment was not necessary and therefore one was not constructed. Due to these facts, this SSCR will not contain an Asbestos Abatement Permit, any waste manifests, or containment sign-in/sign-out documentation.

Kiewit performed the structural demolition for this property.

This document has been prepared to furnish you with key documents associated with this project for your records.

On behalf of the JKS Industries team, we would like to extend our appreciation to working with you on this project and look forward to working with you in the future.

Regards,



Jeffrey Knight,
President

2. CDPHE Asbestos Abatement Courtesy Notice

From: [Ruben Domingo](#)
To: [Charlotte Adams](#)
Subject: FW: CCD- Pump House- Central I-70 Project- Courtesy Notice
Date: Thursday, November 1, 2018 11:11:58 AM
Attachments: [image002.jpg](#)
[image001.jpg](#)

FYI..

Response from Jeff Wolfe.

From: jeffrey.wolfe@state.co.us <jeffrey.wolfe@state.co.us> **On Behalf Of** Asbestos - CDPHE, cdphe
Sent: Thursday, October 11, 2018 12:30 PM
To: Ruben Domingo <rdomingo@jksindustries.net>
Cc: Stephen Dinardo <spdinardo@jksindustries.net>; Jeff Knight <jknight@jksindustries.net>;
Doug.messier@kiewit.com; Curtis Burns <curtis.burns@state.co.us>
Subject: Re: CCD- Pump House- Central I-70 Project- Courtesy Notice

Ruben,

My apologies, you are correct. The material is not regulated as it was point counted at less than <1% asbestos. This will be processed as a courtesy notice. When will the demo application be coming in?

Jeff Wolfe

Permit Coordinator

Asbestos Unit

Indoor Environment Program

Colorado Department of Public Health and Environment

P [303-692-3100](tel:303-692-3100) | F [303-782-0278](tel:303-782-0278)

4300 Cherry Creek Drive South, Denver, CO 80246-1530

cdphe.asbestos@state.co.us | www.colorado.gov/cdphe/asbestos



As of January 1, 2017, the Indoor Environment Program will not accept incomplete forms for certification, abatement or demolition. Any application with missing information may result in longer processing times or the application may be returned to you which will restart the required notification period. Please note that all submissions must be completed using forms supplied by the Division. If you need assistance, please refer to: <https://www.colorado.gov/pacific/cdphe/asbestos-forms> or <https://www.colorado.gov/pacific/cdphe/certification-and-lead-abatement-forms> or contact the Indoor Environment Program at [303-692-3100](tel:303-692-3100).

On Thu, Oct 11, 2018 at 12:24 PM, Ruben Domingo <rdomingo@jksindustries.net> wrote:

| Dear Jeff CDPHE Asbestos Permit Coordinator,

The asbestos material is less than the 1% percent asbestos. You still want a permit application and wait the 10days?

Thank you,

Ruben Domingo
Project Manager
JKS Industries, LLC
jksindustries.net
[JKS Facebook](#)

303-238-0207 Office
303-238-0452 Fax
303-505-3630 Cell



From: jeffrey.wolfe@state.co.us <jeffrey.wolfe@state.co.us> **On Behalf Of** Asbestos - CDPHE, cdphe

Sent: Thursday, October 11, 2018 12:17 PM

To: Stephen Dinardo <spdinardo@jksindustries.net>

Cc: Ruben Domingo <rdomingo@jksindustries.net>; Jeff Knight <jknight@jksindustries.net>; Doug.messier@kiewit.com; Curtis Burns <curtis.burns@state.co.us>

Subject: Re: CCD- Pump House- Central I-70 Project- Courtesy Notice

Stephen/Ruben,

Please confirm if this for the I-70 expansion? If so, this material is regulated and a courtesy notice will not be accepted, as the asbestos trigger levels for the project have already been exceeded. Thus, all work, regardless of quantity, is now regulated. Please resubmit this as a notice application with the ten day notification period in effect.

Jeff Wolfe

Permit Coordinator

Asbestos Unit

Indoor Environment Program

Colorado Department of Public Health and Environment

P 303-692-3100 | F 303-782-0278

[4300 Cherry Creek Drive South, Denver, CO 80246-1530](http://4300CherryCreekDriveSouthDenverCO80246-1530)

cdphe.asbestos@state.co.us | www.colorado.gov/cdphe/asbestos



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On Thu, Oct 11, 2018 at 10:30 AM, Stephen Dinardo <spdinardo@jksindustries.net> wrote:

Thank you forwarding this.

Stephen P. Di Nardo
Director of Quality Management
JKS Industries, LLC
spdinardo@jksindustries.net
303-238-0207 Office
303-478-6203 Cell



From: Ruben Domingo
Sent: Thursday, October 11, 2018 10:24 AM
To: 'Asbestos - CDPHE, cdphe' <cdphe.asbestos@state.co.us>
Cc: Jeff Knight <jknight@jksindustries.net>; Stephen Dinardo <spdinardo@jksindustries.net>; 'Doug.messier@kiewit.com' <Doug.messier@kiewit.com>
Subject: CCD- Pump House- Central I-70 Project- Courtesy Notice

Dear CDPHE Asbestos Permit Coordinator,
Kiewit Has requested JKS to send a courtesy notice for the pump house since Kiewit will be demolishing the building and didn't want any issues with the demolition permit. I will attach the report stating that the window glaze is OSHA regulated since the material is <1% asbestos. Please don't hesitate to call me.

Respectfully,

Ruben Domingo
Project Manager
JKS Industries, LLC
jksindustries.net

[JKS Facebook](#)

303-238-0207 Office

303-238-0452 Fax

303-505-3630 Cell



3. JKS Asbestos Certifications



Colorado Department
of Public Health
and Environment

General Abatement Contractor

This certifies that

JKS Industries, LLC

GAC No.: 18531

has met the certification requirements of 25-7-507, C.R.S. and Air Quality Control Commission Regulation No. 8, Part B, and is hereby authorized to perform asbestos abatement activities in the state of Colorado.

Issued: July 18, 2018

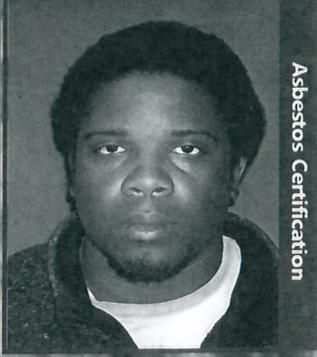
Expires: July 18, 2019


Authorized/APCD Representative

SEAL

4. JKS Workers Asbestos Certifications

Colorado Department
of Public Health and
Environment



Supervisor

Asbestos Certification

**George W.
Thomas**

Expires: 10/25/2018 Cert. #: 17192
Date Issued: 10/25/2017

INTERNATIONAL

Environmental and Safety Training LLC
720 Billings Street Unit F
Aurora, Colorado 80011
Phone # (720) 859-3134
Fax # (720) 859-0660



CERTIFIES THAT

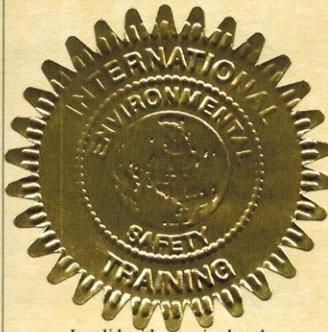
GEORGE W. THOMAS

Has successfully completed
The **EPA- APPROVED AHERA ANNUAL ASBESTOS REFRESHER**
COURSE for **CONTRACTOR/SUPERVISOR**
And passed the requirements examination in that discipline

This course is **EPA-Approved** under Section 206 of the
Toxic Substance Control Act (TSCA)

Course Date 10/06/2018
No. Hours 8
Certificate No. CO100618-04ASR
Expires 10/06/2019

This course meets the
requirements of
AQCC Reg. #8 Part B



Invalid without raised seal

Training Director

Midtown Occupational Health Services
2490 W. 26th Ave. Ste. 300-A Denver, CO 80211
Phone: (303) 831-9393 Fax: (303) 831-6335
OSHA Asbestos Certification

Applicants Name George Thomas

The above individual was seen by me on 02-06-2018 in accordance to 29 CFR 1926.1101(Asbestos Certification) and 29CFR1910.134 (Respirator Certification). The following was performed:

1. Completion and review of the standardized medical questionnaire and work history with special emphasis directed to the pulmonary, cardiovascular, and gastrointestinal systems per Appendix D in 1926.1101
2. Reviewed the employer's description of this individual's duties as they relate to asbestos exposure, the anticipated exposure level, and the personal protective and respiratory equipment to be utilized by this individual.
3. Review of information from previous medical examinations, if available.
4. A physical examination with emphasis upon the pulmonary, cardiovascular, and gastrointestinal systems, including a pulmonary function test of forced vital capacity (FVC) and forced expiratory volume at one second (FEV-1).
5. Determined that a chest roentgenogram was was not required as part of this examination. (note: according to CFR 1926.1101 (M)(2)(ii)(C) it is at the discretion of the physician whether or not a chest X-ray is required)
6. Reviewed OSHA's Medical Evaluation Questionnaire in Appendix C Part A Section 2 in accordance with 29CFR 1910.134 and have determined that this individual may may not use a respiratory device while performing his/her required duties.
7. The employee has been instructed to report any difficulties in using the respirators or any change of physical status to their supervisor or physician.
8. In accordance with OSHA requirements, I have fully explained the results of the medical examination and laboratory tests to the above named patient.
9. In accordance with OSHA I have informed this individual of the health risks involved with smoking, of the synergistic relationship between cigarette smoking and asbestos exposure in producing lung cancer, and that cessation of smoking will reduce the risk of lung cancer.

Midtown Occupational Health Services
 2490 W. 26th Ave. Ste. 300-A Denver, CO 80211
 Phone: (303) 831-9393 Fax: (303) 831-6335
OSHA Asbestos Certification

X There is no detected medical condition which would place this employee at an increased risk of material health impairment from exposure to asbestos, and there are no recommended limitations on the employee concerning the use of personal protective equipment or respirator.

_____ There is a detected medical condition(s) which places this employee at an increased risk. See comments below for limitations:

Comments/ Limitations _____

Richard Kraus PA-C
 Examining Provider

02/06/18
 Date

Richard Kraus M.S., PA.-C
 Midtown Occupational
 Health Services, P.C.
 2490 W. 26th Ave., Bldg. A, Suite 300
 Denver, CO 80211
 303-831-9393

Respirator Fit Test

I, GEORGE THOMAS acknowledge that I have been fit tested and trained for the proper use and care of my respirator. I have read and understand JKS's written respiratory program manual.

Date of Fit Test: 5 7 18 Fit Test Conductor: Ruben Domingo

Respirator Information

- 1. Manufacturer: North
- 2. Model: 7700M
- 3. Size (Circle one): SMALL MEDIUM LARGE
- 4. Approval Number: TC-84A-0592

Irritant smoke used (Circle one)? YES NO

Please initial the following as each test is completed:

- Breathe normally through the respirator
- Breathe deeply through the respirator. Be certain that your breaths are deep and regular
- Turn your head from one side to the other to the fullest extent about every second without bumping the respirator on your shoulders. Ensure that your movement is complete. Inhale on each side.
- Nod your head up and down to the fullest extent about every second without bumping the respirator on your chest. Ensure that your movement is complete and can be completed quickly. Inhale when you are facing up.
- Do several jumping jacks to ensure that the respirator does not come loose from your face.
- Move your mouth to its fullest extent; for example, yawn, move your jaw around, etc. Ensure that you can move your mouth as necessary without compromising the fit of the respirator.
- Read the Rainbow Passage

When the sunlight strikes raindrops in the air, they act like a prism and form a rainbow. A rainbow is a division of white light into many beautiful colors. These take the shape of a long round arch with its path high above and its two ends apparently beyond the horizon. There is, according to legend, a boiling pot of gold at one end. People look, but no one ever finds it. When a man looks for something beyond his reach his friends say he is looking for the pot of gold at the end of the rainbow.

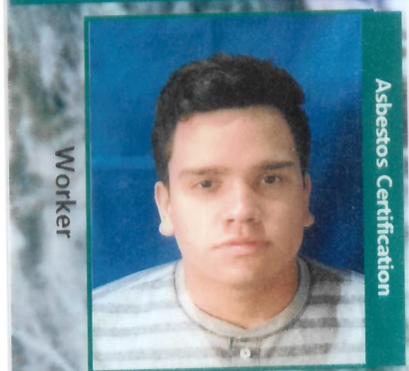
Employee Signature: [Signature]

Date: 5.7.18

Fit Test Conductor Signature: [Signature]

Date: 5/07/18

Colorado Department
of Public Health and
Environment



Worker

Asbestos Certification

Alex Manuel
Martinez-Coa

Expires: 6/20/2019 Cert. #: 24685
Date Issued: 6/20/2018

INTERNATIONAL

Environmental and Safety Training L.L.C.

720 Billings Street Unit F

Aurora, Colorado 80011

Phone # (720) 859-3134

Fax # (720) 859-0660



CERTIFIES THAT

ALEX MANUEL MARTINEZ COA

Has successfully completed
The **EPA- APPROVED AHERA ASBESTOS COURSE** for **WORKER**
And passed the requirements examination in that discipline

This course is **EPA-Approved** under Section 206 of the
Toxic Substance Control Act (TSCA)

Course Date 06/11/2018 - 06/14/2018
Exam Date 06/14/2018
No. Hours 32
Certificate No CO061418-01AWI
Expires 06/14/2019

This course meets the
requirements of
AQCC Reg. #8 Part B



Invalid without raised seal

Training Director

Midtown Occupational Health Services
2420 W. 26th Ave. Ste. 200-D Denver, CO 80211
Phone: (303) 831-9393 Fax: (303) 831-6335
OSHA Asbestos Certification

Applicants Name Alex Martinez

The above individual was seen by me on 6-18-18 in accordance to 29 CFR 1926.1101 (Asbestos Certification) and 29CFR1910.134 (Respirator Certification). The following was performed:

1. Completion and review of the standardized medical questionnaire and work history with special emphasis directed to the pulmonary, cardiovascular, and gastrointestinal systems per Appendix D in 1926.1101
2. Reviewed the employer's description of this individual's duties as they relate to asbestos exposure, the anticipated exposure level, and the personal protective and respiratory equipment to be utilized by this individual.
3. Review of information from previous medical examinations, if available.
4. A physical examination with emphasis upon the pulmonary, cardiovascular, and gastrointestinal systems, including a pulmonary function test of forced vital capacity (FVC) and forced expiratory volume at one second (FEV-1).
5. Determined that a chest roentgenogram was was not required as part of this examination. (note: according to CFR 1926.1101 (M)(2)(ii)(C) it is at the discretion of the physician whether or not a chest X-ray is required)
6. Reviewed OSHA's Medical Evaluation Questionnaire in Appendix C Part A Section 2 in accordance with 29CFR 1910.134 and have determined that this individual may may not use a respiratory device while performing his/her required duties.
7. The employee has been instructed to report any difficulties in using the respirators or any change of physical status to their supervisor or physician.
8. In accordance with OSHA requirements, I have fully explained the results of the medical examination and laboratory tests to the above named patient.
9. In accordance with OSHA I have informed this individual of the health risks involved with smoking, of the synergistic relationship between cigarette smoking and asbestos exposure in producing lung cancer, and that cessation of smoking will reduce the risk of lung cancer.

Midtown Occupational Health Services
2420 W. 26th Ave. Ste. 200-D Denver, CO 80211
Phone: (303) 831-9393 Fax: (303) 831-6335
OSHA Asbestos Certification

There is no detected medical condition which would place this employee at an increased risk of material health impairment from exposure to asbestos, and there are no recommended limitations on the employee concerning the use of personal protective equipment or respirator.

There is a detected medical condition(s) which places this employee at an increased risk. See comments below for limitations:

Comments/ Limitations _____

Examining Provider

J. Raschbacher, M.D.

JUN 18 2018

Date

J. Raschbacher, M.D.
 Midtown Occupational
 Health Services, P.C.
 2490 W. 26th Ave., Bldg. A, Suite 300
 Denver, CO 80211
 303-831-9393

Midtown Occupational Health Services

2490 W 26th Ave Bld A Ste 300, Denver, CO 80219

Martinez, Alex

ID: 7900 Age: 18 (11/23/1999)

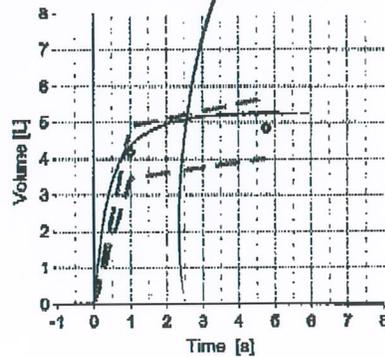
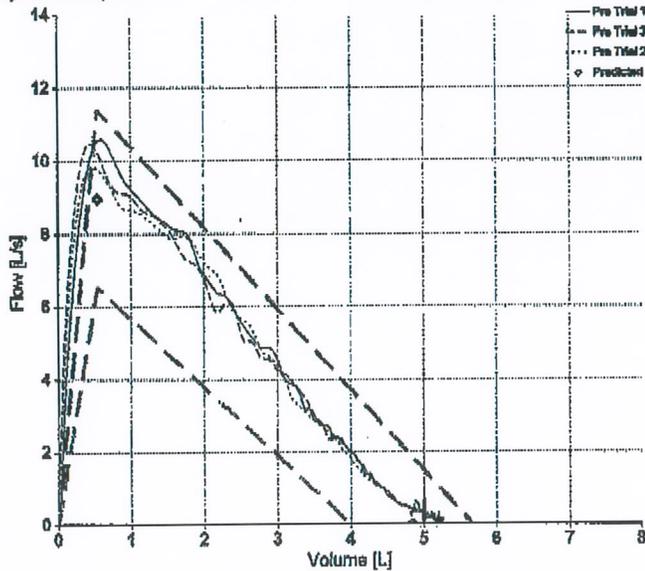
Gender	Male	Height	67 In	Asthma	No
Ethnicity	Hispanic	Weight	170 lb	BMI	26.6
Smoker	No			COPD	--

FVC (ex only)

Your FEV1 / Predicted: 105 %

Test Date	6/18/2018 11:58:53 AM	Interpretation	GOLD(2008)/Hardie	Value Selection	Best Value
Post Time		Predicted	Hankinson (NHANES III), 1999	BTPS (IN/EX)	1,10/1,02

Parameter	Pred	Pre					%Pred
		LLN	Best	Trial 1	Trial 3	Trial 2	
FVC [L]	4.84	4.00	5.27	5.26	5.24	5.27	109
FEV1 [L]	4.18	3.47	4.37	4.37	4.35	4.32	105
FEV1/FVC	0.860	0.769	0.829	0.831	0.831	0.819	96
FEF25-75 [L/s]	4.73	3.15	4.51	4.51	4.42	4.37	95
PEF [L/s]	8.97	6.54	10.61	10.61	10.48	9.84	118
FET [s]	-	-	4.8	4.8	5.8	4.9	-
Session Quality	Pre	A (FEV1 Var=0.02L (0.3%); FVC Var=0.02L (0.5%))					
System Interpretation	Pre	Normal Spirometry					



Respirator Fit Test

I, Alex Martinez Coa, acknowledge that I have been fit tested and trained for the proper use and care of my respirator. I have read and understand JKS's written respiratory program manual.

Date of Fit Test: 6/21/2018 Fit Test Conductor: Ruben Dominguez

Respirator Information

- 1. Manufacturer: North
- 2. Model: 7700M
- 3. Size (Circle one): SMALL MEDIUM LARGE
- 4. Approval Number: TC-84A-0592

Irritant smoke used (Circle one)? YES NO

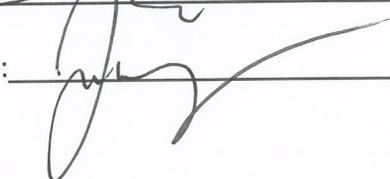
Please initial the following as each test is completed:

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- Move your mouth to its fullest extent; for example, yawn, move your jaw around, etc. Ensure that you can move your mouth as necessary without compromising the fit of the respirator.
- Read the Rainbow Passage

When the sunlight strikes raindrops in the air, they act like a prism and form a rainbow. A rainbow is a division of white light into many beautiful colors. These take the shape of a long round arch with its path high above and its two ends apparently beyond the horizon. There is, according to legend, a boiling pot of gold at one end. People look, but no one ever finds it. When a man looks for something beyond his reach his friends say he is looking for the pot of gold at the end of the rainbow.

Employee Signature: 

Date: 6/21/2018

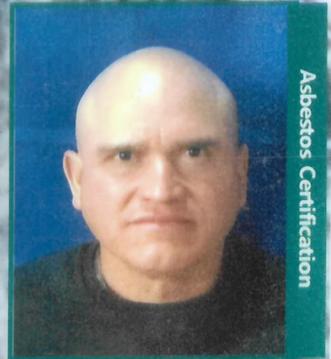
Fit Test Conductor Signature: 

Date: 6/21/2018

Colorado Department
of Public Health and
Environment



Worker



Asbestos Certification

Alex Manuel
Martinez-Coronel

Expires: 6/20/2019 Cert. #:24686

Date Issued: 6/20/2018

INTERNATIONAL

Environmental and Safety Training L.L.C.

720 Billings Street Unit F

Aurora, Colorado 80011

Phone # (720) 859-3134

Fax # (720) 859-0660



CERTIFIES THAT

ALEX MANUEL MARTINEZ CORONEL

Has successfully completed
The **EPA- APPROVED AHERA ASBESTOS COURSE** for **WORKER**
And passed the requirements examination in that discipline

This course is **EPA-Approved** under Section 206 of the
Toxic Substance Control Act (TSCA)

Course Date 06/11/2018 - 06/14/2018

Exam Date 06/14/2018

No. Hours 32

Certificate No CO061418-02AWI

Expires 06/14/2019

This course meets the
requirements of
AQCC Reg. #8 Part B



Invalid without raised seal

A handwritten signature in blue ink, appearing to read 'F. Cuervo'.

Training Director

Midtown Occupational Health Services
2420 W. 26th Ave. Ste. 200-D Denver, CO 80211
Phone: (303) 831-9393 Fax: (303) 831-6335
OSHA Asbestos Certification

Applicants Name Alex Martinez

The above individual was seen by me on 6-18-78 in accordance to 29 CFR 1926.1101 (Asbestos Certification) and 29CFR1910.134 (Respirator Certification). The following was preformed:

1. Completion and review of the standardized medical questionnaire and work history with special emphasis directed to the pulmonary, cardiovascular, and gastrointestinal systems per Appendix D in 1926.1101
2. Reviewed the employer's description of this individual's duties as they relate to asbestos exposure, the anticipated exposure level, and the personal protective and respiratory equipment to be utilized by this individual.
3. Review of information from previous medical examinations, if available.
4. A physical examination with emphasis upon the pulmonary, cardiovascular, and gastrointestinal systems, including a pulmonary function test of forced vital capacity (FVC) and forced expiratory volume at one second (FEV-1).
5. Determined that a chest roentgenogram was was not required as part of this examination. (note: according to CFR 1926.1101 (M)(2)(i)(C) it is at the discretion of the physician whether or not a chest X-ray is required)
6. Reviewed OSHA's Medical Evaluation Questionnaire in Appendix C Part A Section 2 in accordance with 29CFR 1910.134 and have determined that this individual may may not use a respiratory device while performing his/her required duties.
7. The employee has been instructed to report any difficulties in using the respirators or any change of physical status to their supervisor or physician.
8. In accordance with OSHA requirements, I have fully explained the results of the medical examination and laboratory tests to the above named patient.
9. In accordance with OSHA I have informed this individual of the health risks involved with smoking, of the synergistic relationship between cigarette smoking and asbestos exposure in producing lung cancer, and that cessation of smoking will reduce the risk of lung cancer.

Midtown Occupational Health Services
2420 W. 26th Ave. Ste. 200-D Denver, CO 80211
Phone: (303) 831-9393 Fax: (303) 831-6335
OSHA Asbestos Certification

1 There is no detected medical condition which would place this employee at an increased risk of material health impairment from exposure to asbestos, and there are no recommended limitations on the employee concerning the use of personal protective equipment or respirator.

 There is a detected medical condition(s) which places this employee at an increased risk. See comments below for limitations:

Comments/ Limitations _____

J. Raschbacher

Examining Provider

J. Raschbacher, M.D.

Date _____

J. Raschbacher, M.D.
Midtown Occupational
Health Services, P.C.
2490 W. 26th Ave., Bldg. A, Suite 300
Denver, CO 80211
303-831-9393

Midtown Occupational Health Services

2490 W 26th Ave Bld A Ste 300, Denver, CO 80219

Alex, Martinez

ID: 0506 Age: 57 (10/10/1960)

Gender	Male	Height	66 In	Asthma	No
Ethnicity	Hispanic	Weight	156 lb	BMI	25.2
Smoker	No			COPD	--

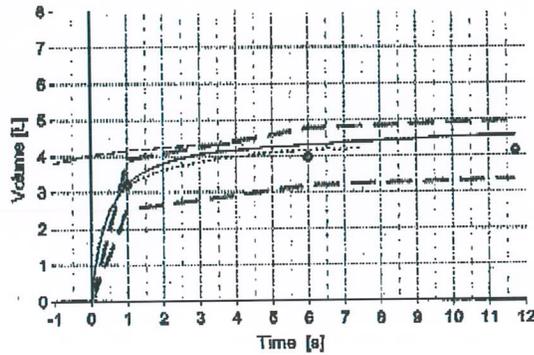
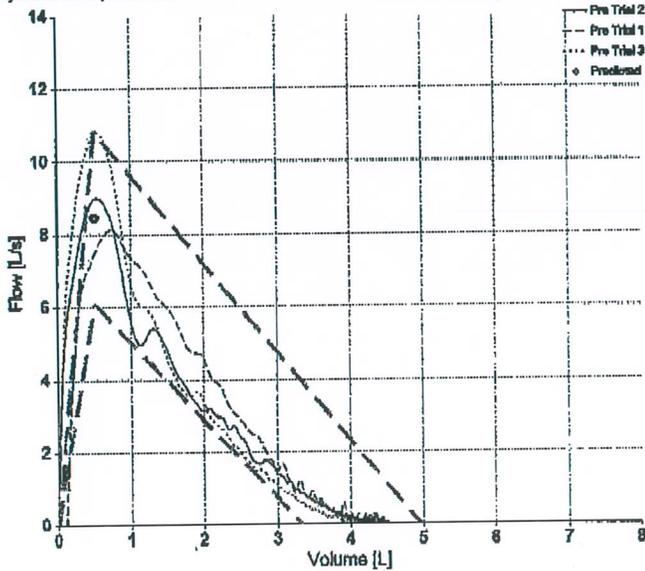
FVC (ex only)

Your FEV1 / Predicted: 105 %

Test Date	6/18/2018 12:15:39 PM	Interpretation	GOLD(2008)/Hardie	Value Selection	Best Value
Post Time		Predicted	Hankinson (NHANES III), 1999	BTPS (IN/EX)	1.09/1.02

Parameter	Pred	LLN	Pre				%Pred
			Best	Trial 2	Trial 1	Trial 3	
FVC [L]	4.15	3.34	4.54	4.54	4.37	4.18	110
FEV1 [L]	3.21	2.52	3.38	3.22	3.38	3.12	105
FEV1/FVC	0.775	0.684	0.744	0.710	0.774	0.747	96
FEF25-75 [L/s]	2.96	1.42	2.14	2.14	2.88	2.32	73
PEF [L/s]	8.45	6.09	10.79	9.01	8.12	10.79	128
FET [s]	-	-	11.7	11.7	6.8	7.3	-

Session Quality Pre C (FEV1 Var=0.16L (4.6%); FVC Var=0.18L (3.9%))
 System Interpretation Pre Normal Spirometry



Respirator Fit Test

I, Alex Martinez Coronell, acknowledge that I have been fit tested and trained for the proper use and care of my respirator. I have read and understand JKS's written respiratory program manual.

Date of Fit Test: 6/21/2018 Fit Test Conductor: Ruben Dominguez

Respirator Information

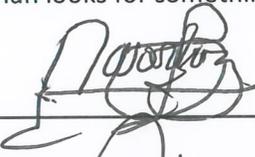
- 1. Manufacturer: North
- 2. Model: 7700M
- 3. Size (Circle one): SMALL MEDIUM LARGE
- 4. Approval Number: TC-84A-0592

Irritant smoke used (Circle one)? YES NO

Please initial the following as each test is completed:

- Breathe normally through the respirator
- Breathe deeply through the respirator. Be certain that your breaths are deep and regular
- Turn your head from one side to the other to the fullest extent about every second without bumping the respirator on your shoulders. Ensure that your movement is complete. Inhale on each side.
- Nod your head up and down to the fullest extent about every second without bumping the respirator on your chest. Ensure that your movement is complete and can be completed quickly. Inhale when you are facing up.
- Do several jumping jacks to ensure that the respirator does not come loose from your face.
- Move your mouth to its fullest extent; for example, yawn, move your jaw around, etc. Ensure that you can move your mouth as necessary without compromising the fit of the respirator.
- Read the Rainbow Passage

When the sunlight strikes raindrops in the air, they act like a prism and form a rainbow. A rainbow is a division of white light into many beautiful colors. These take the shape of a long round arch with its path high above and its two ends apparently beyond the horizon. There is, according to legend, a boiling pot of gold at one end. People look, but no one ever finds it. When a man looks for something beyond his reach his friends say he is looking for the pot of gold at the end of the rainbow.

Employee Signature: 

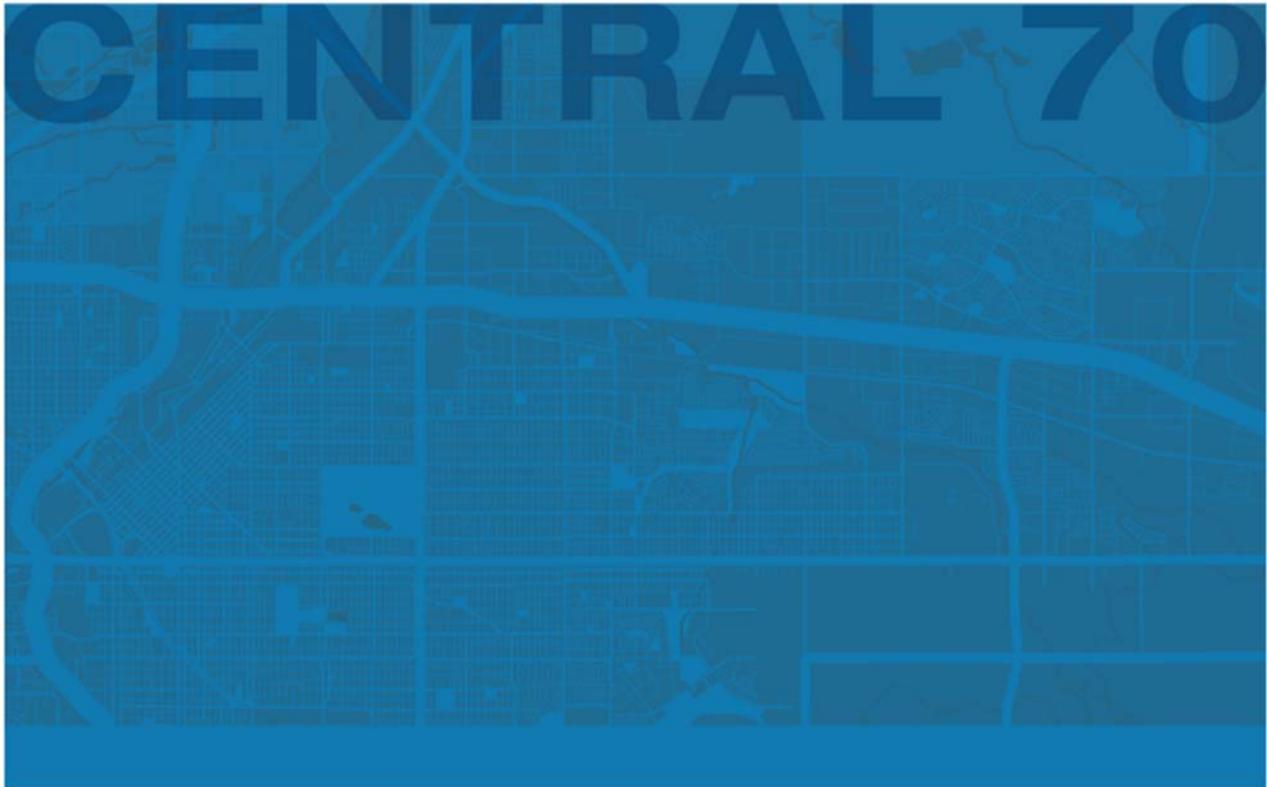
Fit Test Conductor Signature: 

Date: 06/21/18

Date: 6/21/2018

5. Project Design

5a. SSAR



July 31, 2018



Structure Survey Assessment Report - CCD PUMP HOUSE

Denver, CO 80216

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LIST OF REPORT ACRONYMS/ABBREVIATIONS

ACMs	Asbestos Containing Materials
AHERA	Asbestos Hazard Emergency Response Act
APEC	All-Phase Environmental Consultants
AMS	Air Monitoring Specialist
CABI	Colorado Asbestos Building Inspector
CDOT	Colorado Department of Transportation
CDPHE	Colorado Department of Public Health and Environment
CFCs	Chlorofluorocarbons
CFR	Code of Federal Regulations
EP	Environmental Professional
EPA	Environmental Protection Agency
FAA	Flame Atomic Absorption
LBP	Lead Based Paint
LCP	Lead Containing Paint
mg/L	Milligrams per liter
NESHAP	National Emissions Standards for Hazardous Air Pollutants
NVLAP	National Voluntary Laboratory Accreditation Program
OSHA	Occupational Safety and Health Administration
PCBs	Polychlorinated Biphenyls
PD	Project Designer
PEL	Permissible Exposure Limits
PLM	Polarized Light Microscopy
PPE	Personal Protective Equipment
ppm	Parts Per Million
RBM	Regulated Building Materials
RCRA	Resource Conservation and Recovery Act
RHMs	Recognized Hazardous Materials
SSAP	Structure Survey Assessment Plan
TC	Toxicity Characteristic
TCLP	Toxicity Characteristic Leaching Procedure
USEPA	U.S. Environmental Protection Agency
UWR	EPA Universal Waste Rule

Tables

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Figure 3	Lead-Based Paint Sample Locations
Figure 4	Regulated Building Materials

Appendices

Appendix A	Asbestos, Lead Inspector and Laboratory Certifications
Appendix B	Positive Lead Sample Material Photographs
Appendix C	Laboratory Results & Chain of Custody – Asbestos
Appendix D	Laboratory Results & Chain of Custody – Lead & TCLP

APEC Project # 18-3066-029

Prepared for

Kiewit Meridiam Partners

Prepared by

Logan Greenfield
Logan Greenfield, CABI & AMS #20715
VP of Field Services

Reviewed by

Brandice Eslinger
Brandice Eslinger, EP, CABI & PD # 5494
President

1 Introduction

APEC was contracted to complete an environmental building survey for suspect ACMs, LBP, and RBM. This survey will assist in the identification of materials that need to be abated or removed prior to the future demolition activities.

Table 1-1 Project Details

Client Name:	Kiewit Meridiam Partners
Site Location:	CCD Pump House, Denver, CO 80216
Building Type	Commercial
Building Size	Building is approximately 200 square feet
Construction Date:	Unknown
Building Uses:	Stormwater pump station
Types of Materials to be Disturbed/Description of Proposed Disturbances:	Client intends to demolish the structure. All building materials will be impacted.

This Structure Survey Assessment was conducted as part of the Central 70 Project located in Denver, Colorado. This assessment was conducted in accordance with the SSAP, dated March 27, 2018. The SSAP, as defined in Section 23.13.2 of Schedule 17 (Environmental Requirements) of the final Central 70 Project Agreement between CDOT and Kiewit Meridiam Partners, identifies the procedures for completing building and structure surveys for ACMs, LBP and universal wastes or other RHMs, as defined by the RCRA; universal waste, as defined by the USEPA and 6 CCR Part 273 of the Colorado Hazardous Waste Regulations; CFCs, as defined by the Clean Air Act; and PCBs, as defined by the Toxic Substances Control Act.

2 Site Survey Methodology

2.1 ASBESTOS SURVEY

On June 29, 2018, APEC certified personnel Logan Greenfield conducted an asbestos survey for demolition at the aforementioned address. The asbestos survey (inspection/sampling) was completed in accordance with the SSAP and follows guidelines established under the USEPA's AHERA program, and as required by USEPA regulation 40 CFR Part 61, NESHAP. Bulk sampling of suspected ACMs were conducted in strict accordance with AHERA sampling procedures detailed in 40 CFR 763.86. These include but aren't limited to labeling each sample, recording each sample on a chain of custody, taking a photo of the sample, and recording the location on a site diagram. Demolition work could disturb materials that contain asbestos and put unprotected workers at risk, violating asbestos regulations, which are enforced by OSHA, the EPA, the CDPHE, and the Denver County Health Department. All samples were collected and submitted to EMSL Analytical, Inc. in Denver, CO per APEC chain of custody protocol. The laboratory is a member of NVLAP and is qualified to perform the required analysis (Appendix A). The analysis conducted was the EPA Interim Method for the Determination of Asbestos in Bulk Samples, using standard PLM and dispersion staining as established in 40 CFR Part 763.

This inspection report and methodology complies with the CDPHE Asbestos Sampling and Report Requirements Memorandum dated February 28, 2018.

2.2 LEAD-BASED PAINT SURVEY

On June 29, 2018, APEC certified personnel Rick Ralston conducted the LBP survey. The LBP survey was conducted to evaluate the absence and/or presence of LBP or LCP that will be impacted during future demolition activities. The survey consisted of reviewing and inspecting the interior, exterior and roof system of the structure for suspect LBP or LCP. The testing method makes use of a heat gun and/or scraper; removing a portion of the paint down to the substrate (material under the paint). Proper chain of custody procedures were followed and samples were sent to EMSL Analytical, Inc. in Cinnaminson, NJ, via Fed Ex. The samples were analyzed by total lead (percent by weight) via FAA by EPA Method 7420. EMSL is accredited under the American Industrial Hygiene Association's Environmental Lead Proficiency Analytical Testing program. LBP, according to the EPA, is defined as paint that contains lead in concentrations greater than 1.0 milligrams per square centimeter (mg/cm²) as measured with an XRF or 5000 ppm when measured by weight, or 0.5 percent by weight.

A total of 7 homogeneous paint color variations of suspect LBP areas were identified. One paint chip sample was collected from each suspect homogeneous area and submitted to the laboratory for analysis. Representative photographs of LBP and/or LCP were taken and are included in the photographic log (Appendix B). The paint chip sample locations were recorded and are included on the sample location drawing (Figure 3). Descriptions of the suspect homogeneous materials and a list of the collected samples are described in the 'Findings' section.

Based on the analytical results for the 7 samples, a TCLP sample was analyzed by collecting a representative sample (approximately 105 grams) of combined suspect building materials. The sample results are located in Appendix D.

2.3 SURVEY OF SUSPECTED RBMS

On June 29, 2018, APEC personnel conducted the RBM inventory consisting of inspecting the interior, exterior and roof system. The inspection was conducted to visually identify and quantify any building materials, devices and equipment suspected of containing potentially regulated materials as they pertain to the EPA UWR requirements (40 CFR, Part 273). APECs inventory review consisted of the following: potential mercury-containing thermostats/switches; fluorescent light tubes and compact fluorescent bulbs; items potentially containing PCBs (generally ballasts found within the fluorescent light fixtures); tritium powered exit signs; smoke detectors potentially containing Americium-241; and Freon-containing refrigeration systems. The survey of suspected RBMS are for use by contractors conducting the removal of items from the property. Samples of suspect RBMs are not required for this type of survey, as all determinations are made by visual means.

Although not a “regulated material”, things such as gas meters, electrical meters and electrical panels are listed with the RBM inventory. These materials will require removal and/or disconnection prior to demolition. These materials should be handled with care until deemed safe.

3 Findings

3.1 ASBESTOS SURVEY

A total of 10 bulk samples, including 1 duplicate samples, were collected from 3 suspect homogenous materials throughout the structure. The results of the PLM analysis are presented in Table 3-1. NO samples analyzed positive for ACMs, per Regulation 8 and EPA (i.e. present greater than 1%).

Point Counts

Point count analysis occurs for samples with <1% of asbestos for all samples in a homogeneous group. The point count results are also presented in Table 3-1. The laboratory analytical report is included as Appendix C. The following samples were confirmed to be OSHA regulated, due to analyzing at/or below 1% of asbestos due to point count analysis:

- CCDPH-1A – Window Glazing
- CCDPH-1B – Window Glazing
- CCDPH-1C – Window Glazing

Duplicate Samples

For quality assurance purposes, duplicate samples are taken approximately every 20th sample, per the EPA “pink book” that is used by Colorado Regulation 8 for sampling protocol. Duplicate samples are listed as a duplicate (Q) in the sample location column of Table 3-1. One sample, CCDPH-3Q, was collected because a total of 9 samples were obtained.

3.2 LEAD-BASED PAINT SURVEY

A total of 7 homogeneous paint color variations were analyzed for the presence of LBPs and LCPs (Table 3-2; Figure 3). Under EPA 40 CFR Part 745, LBP is defined as any paint or surface coating that contains lead equal to or exceeding 0.5% (by weight), while LCP is defined as any paint or surface coating containing lead greater than or equal to 0.06% up to 0.5% (by weight). Caution should be taken during demolition to minimize cutting, abrading, or otherwise causing an air disturbance to this material and work must be completed in accordance with the OSHA Lead in Construction Standard (29 CFR 1926.62).

One lead sample (CCD-MR-1L) was found to be greater than 0.06% by weight and less than 0.5% by weight and is considered LCP (Table 3-2). The remaining 6 samples were less than the LCP and LBP thresholds, and are considered non-lead containing paint (NLC). The laboratory analytical report is included in Appendix D.

3.2.1 TCLP LEAD ANALYTICAL RESULTS

Since one sample analyzed as a LCP a TCLP analysis of lead was performed. TCLP analysis simulates the potential for the demolished building materials to leach lead if placed in the landfill and results of the analysis determine if the materials will be considered hazardous waste. TCLP analysis was performed for landfill compliance and the TC maximum concentration is 5 mg/L. The results of the TCLP analysis is 2.9 mg/L, which is below the regulated limit and therefore not considered hazardous. The analytical report is included in Appendix D.

3.3 REGULATED BUILDING MATERIALS INVENTORY SURVEY

Several suspect RBMs were visually identified throughout the structure. RBMs that are a cause of concern, when discovered, are discussed below. A complete list of the RBMs is presented in Table 3-3, and selected locations of the RBMs are depicted in Figure 4.

4 Conclusions and Recommendations

4.1 ASBESTOS

No ACM's were identified throughout the structure; however, if additional suspect materials, not sampled during this investigation, are identified during demolition, they should either be assumed to be ACM or should be sampled prior to disturbance.

According to AHERA, EPA, and the CDPHE, materials testing at less than or equal to 1% asbestos fibers are not considered to be an ACM. However, any materials containing asbestos still need to be regulated. OSHA protocol must be followed when handling materials containing ANY amount of asbestos. Proper PPE and engineering controls must be utilized if these materials will be impacted during demolition activities.

4.2 LEAD-BASED PAINT

Lead was detected at concentrations above the LCP threshold in 1 of the 7 samples. The remaining 6 samples are considered NLC. Although LCP was identified in the samples analyzed, the TC limit of 5 mg/L was not exceeded in the TCLP lead analysis. No lead abatement is required prior to demolition.

TCLP results confirmed that the waste stream is not hazardous with respect to lead content.

While the TCLP results indicate that the waste stream is not characteristically hazardous with respect to lead content, LCP is still present in the building materials. Therefore, the contractor responsible for demolition of this structure is notified with receipt of this report of the presence or potential presence of LCP in the building materials that comprise the building. The contractor should also notify their employees of the presence of LCP or LBP prior to any disturbance and make the US Department of Labor OSHA publication number 3142-12R 2004 available to their workers. ("Lead in Construction", <http://www.osha.gov/Publications/osh3142.pdf>). The standards address topics such as PELs for workers, exposure assessment, protection of employees during assessment of exposure, employee notification, PPE, medical surveillance, along with other topics related to working with LCP and LBP.

4.3 REGULATED BUILDING MATERIALS

Materials found during the regulated materials inventory within the building may require special handling or disposal prior to demolition activities. If abatement is needed, APEC recommends that the asbestos contractor or general contractor selected by the client properly dispose of these regulated materials, per applicable regulations.

With regards to RBMs, if listed, it is likely that the ballasts in the fluorescent light fixtures do contain PCBs. Where a manufacturer's label is present indicating "no PCBs", the ballast can be disposed of with recyclable metal or with other municipal waste. During removal for disposal as part of the demolition activities, each ballast should be visually inspected for the manufacturer's label indicating "no PCBs". If the label does not have this notation, the ballast should be considered PCB-containing and should be disposed of as a hazardous waste in accordance with local, state, and federal regulatory guidelines. Refrigerators and air conditioning units contain freon, which will need to be reclaimed or taken to a facility capable of this activity. Mercury containing thermostats will need to be disposed of at a facility certified to take this type of material. The contractor should also carefully remove all associated fluorescent light tubes and compact fluorescent lights and recycle or dispose of these materials according to applicable regulations.

This inspection was primarily relevant to the Federal UWR requirements under 40 CFR 273. It should be noted that contractors submitting bids for removal of the RBMs should verify quantities, conditions, and locations of all RBMs prior to bid submittals and initiating demolition activities. The contractor is also responsible for proper recycling and/or disposal of the RBMs, and should follow all federal, state and local regulations when handling these materials.

5 Limitations

This Structure Survey Assessment Report was prepared by All-Phase Environmental Consultants, Inc., at the request of and for the sole benefit of Kiewit Meridiam Partners, or any entity controlling, controlled by, or under common control with Colorado Department of Transportation. APECs certified inspectors used reasonable diligence and professional judgement to identify all suspect asbestos-containing materials, lead based paint, and regulated building materials in the property. APEC will not be held liable for property damage or any loss of property value due to the inspection. This report is not an abatement plan and is intended to be informational only; APEC will not be held responsible for the mishandling of the information contained herein.

APEC utilized destructive inspection methods in performing this survey, however accessibility may have been a limiting condition. If additional impacted suspect materials are discovered during related work for which there are no sample documentation/results, APEC recommends pursuing one of the following alternatives: Sample and analyze the discovered suspect material(s) to determine whether it contains asbestos, lead or other regulated materials; or assume the material(s) to be containing, quantify and remove on a unit cost basis.

Notwithstanding any provision to the contrary, the total liability of "All Phase Environmental Consultants, Inc.", and its employees, officers or directors be liable in contract, tort, strict liability warranty or otherwise, for any special, incidental or consequential damages, such as but not limited to, delay, disruption, loss of product, loss of anticipated profits or revenue, damages, cost, and expenses, including attorney's fees, shall not exceed the aggregate amount paid to All Phase Environmental Consultants, Inc. under this Agreement regardless of the legal theory under which such liability is imposed.

Tables

Table 3-1	Non-Asbestos Containing & OSHA Regulated Samples
Table 3-2	Summary of Paint Chip Laboratory Analysis for Lead
Table 3-3	Summary of Regulated Building Materials

Table 3-1 Non-Asbestos Containing and OSHA Regulated Materials

Sample Name	Sample Location	Lab Results/ Asbestos Type	Detection Method(s)	Condition	Material Description	Material Location	NESHAP Classification
CCDPH-1A	INTERIOR	POINT COUNT 0.25% CHRYSOTILE	POINT COUNT	Good	Window glazing	Windows	OSHA
CCDPH-1B	INTERIOR	POINT COUNT < 0.25% CHRYSOTILE	POINT COUNT	Good			OSHA
CCDPH-1C	INTERIOR	POINT COUNT 0.25% CHRYSOTILE	POINT COUNT	Good			OSHA
CCDPH-2A	INTERIOR	ND	PLM	Good	Concrete/paint	walls and floor of pumphouse	NA
CCDPH-2B	INTERIOR	ND	PLM	Good			NA
CCDPH-2C	INTERIOR	ND	PLM	Good			NA
CCDPH-3A	ROOF	ND	PLM	Good	Roofing material	Roof	NA
CCDPH-3B	ROOF	ND	PLM	Good			NA
CCDPH-3C	ROOF	ND	PLM	Good			NA
CCDPH-3Q	ROOF	ND	PLM	Good			NA
ND=Non-Detect PLM=Polarized Light Microscopy NA=Not Applicable							

Table 3-2 Summary of Paint Chip Analysis for Lead

Sample Number	Sample Location	Lead Concentration (% wt.)	Component	Paint Description	Classification
CCD-MR-1L	MAIN ROOM	0.26	METAL	BLUE	LCP
CCD-MR-2L	DOOR AND TRIM	0.040	WOOD	GRAY	NLC
CCD-MR-3L	CEILING	0.012	PLASTER	Tan	NLC
CCD-MR-4L	ROOF PARAPET WALL	<0.0080	PLASTER	White	NLC
CCD-MR-5L	ELECTRICAL BOXES	0.025	METAL	GREEN	NLC
CCD-MR-6L	SIDE OF BUILDING	0.027	METAL	FAWN	NLC
CCD-MR-7L	ELECTRICAL BOXES	<0.028	METAL	AQUA	NLC

Table 3-3 Summary of Regulated Building Materials

Room	Material	Location	Quantity Fixture/Bulbs each
Interior	Breaker Panel	North wall	1
Exterior	Electrical Meter	South End	1

Figures

- Figure 1 Site Location
- Figure 2 Asbestos Bulk Sample Locations
- Figure 3 Lead-Based Paint Sample Locations
- Figure 4 Regulated Building Materials

FIGURE 1

CCD Pump House

Legend



Vine St

E 46th Ave

Canam Hwy

U.S. Hwy 85

85

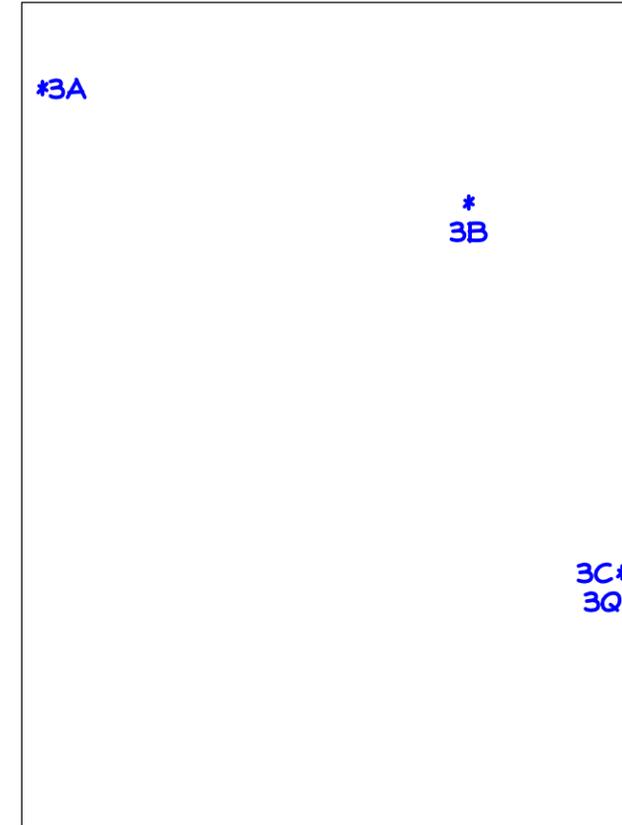
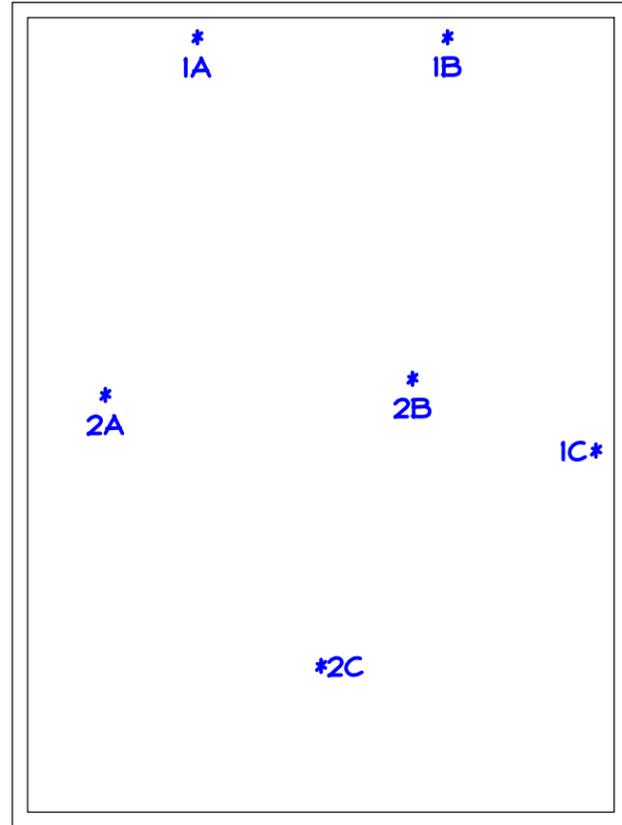
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Google Earth

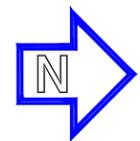
©2018 Google

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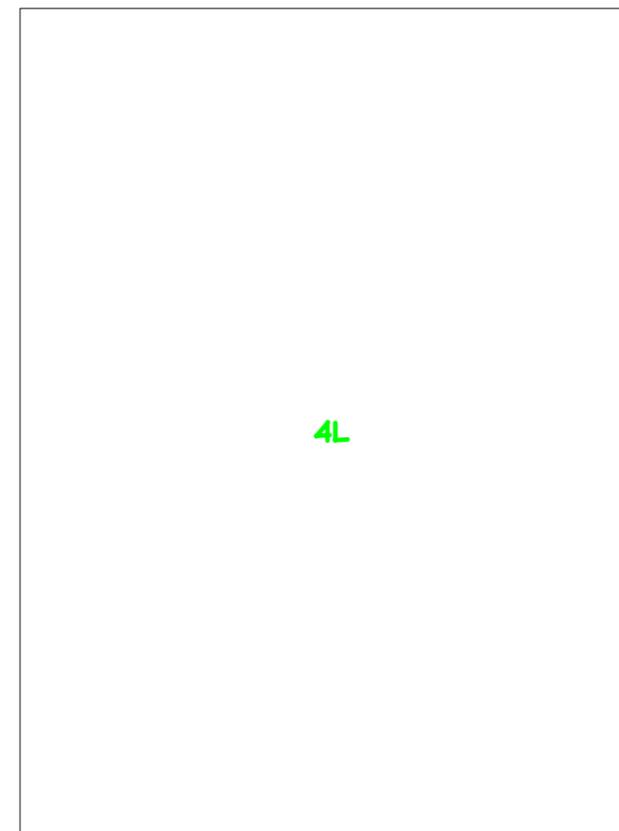
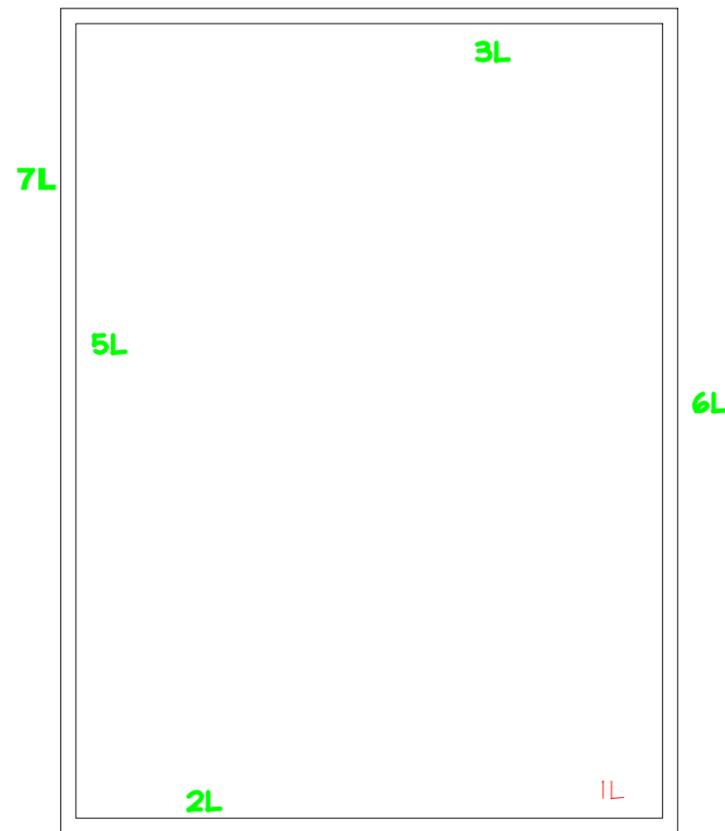


APPROVED: B.N.E.
SCALE: 1/4" = 1'-0"

- RI = Room Numbers
- 4B** = Asbestos Samples (Detect)
- 4B** = Asbestos Samples (Non-Detect)

FIGURE 2 - Asbestos Bulk Sample Locations
CENTRAL 70 - Structure Survey Assessment Map
AP-Pump House
CCD Pump House
June 29, 2018
APEC #: 18-3066

ALL-PHASE
ENVIRONMENTAL CONSULTANTS, INC.
721 W 9TH STREET
Pueblo, CO 81003 Ph: (719) 545-0375



ROOF

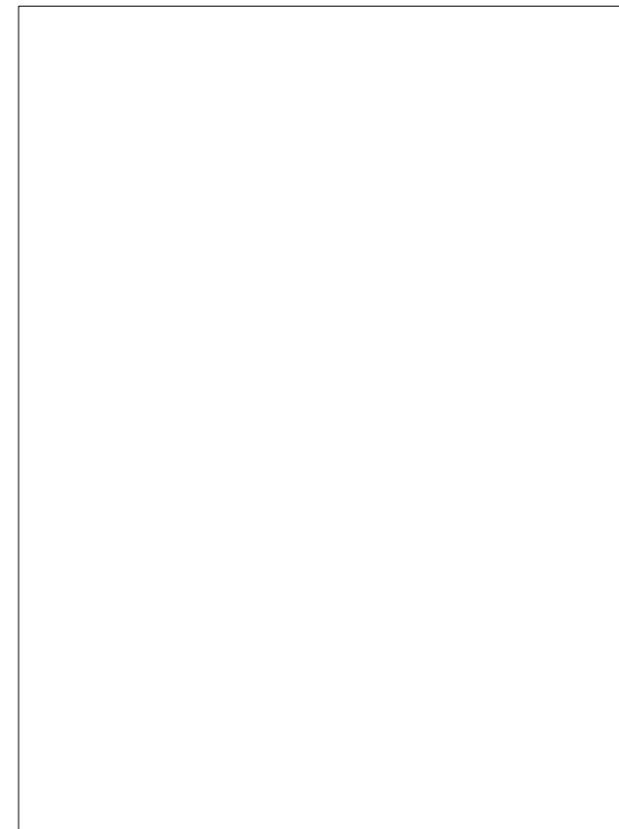
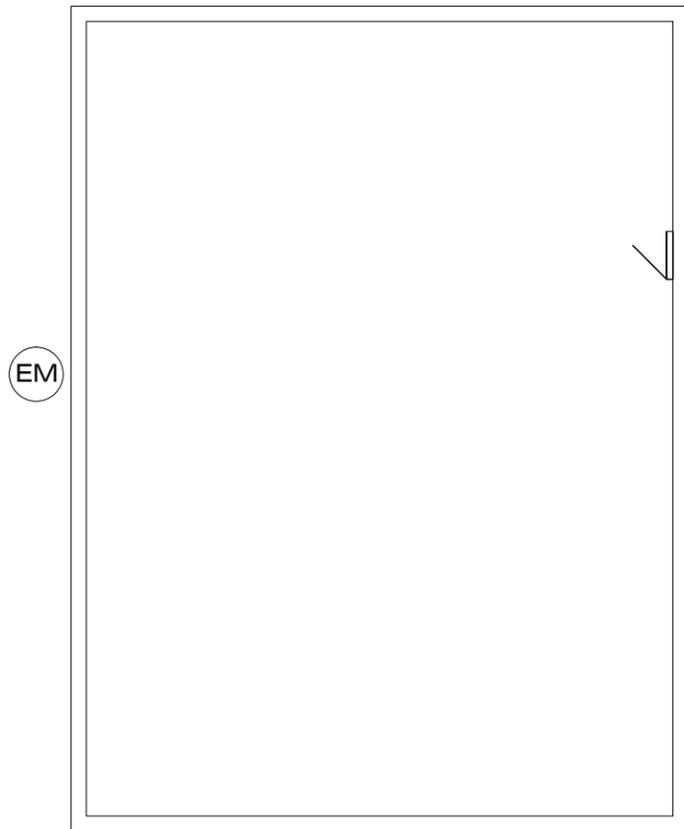


DR BY: R.A.
 APPROVED: B.N.E.
 SCALE: 1/4" = 1'-0"

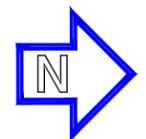
- RI = Room Numbers
- 4 = Lead Base Paint (Detect)
- 4 = Lead Containing Paint (Detect)
- 4 = Lead Base Paint (Non-Detect)

FIGURE 3 - Lead Based Paint Sample Location
 CENTRAL 70 - Structure Survey Assessment Map
 AP-Pump House
 CCD Pump House
 June 29, 2018
 APEC #: 18-3066

ALL-PHASE
 ENVIRONMENTAL CONSULTANTS, INC.
 721 W 9TH STREET
 Pueblo, CO 81003 Ph: (719) 545-0375



ROOF



DR BY: R.A.
APPROVED: B.N.E.
SCALE: 1/4" = 1'-0"

RI = Room Numbers

 = Electrical Meter

 = Breaker Panel

FIGURE 4 - Regulated Building Material
CENTRAL 70 - Structural Survey Assessment Map
AP-Pump House
CCD Pump House
June 29, 2018
APEC #: 18-3066



ALL-PHASE
 ENVIRONMENTAL CONSULTANTS, INC.
 721 W 9TH STREET
 Pueblo, CO 81003 Ph: (719) 545-0375

A

ASBESTOS, LEAD AND
LABORATORY CERTIFICATIONS





Colorado Department
of Public Health
and Environment

ASBESTOS CERTIFICATION*

This certifies that

Logan Greenfield

Certification No.: 20715

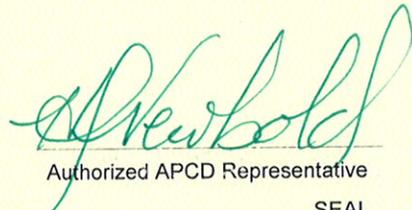
has met the requirements of 25-7-507, C.R.S. and Air Quality Control
Commission Regulation No. 8, Part B, and is hereby certified by the
state of Colorado in the following discipline:

Building Inspector*

Issued: October 18, 2017

Expires: October 18, 2018

** This certificate is valid only with the possession of a
current Division-approved training course certification
in the discipline specified above.*


Authorized APCD Representative
SEAL



1775 West 55th Avenue
Denver, CO 80221
303.410.4941
trainingchc.com



Certifies that

Logan Greenfield

20715

*Has Successfully Completed the EPA- Approved Annual Asbestos Refresher Training Course
Under Section 206 of the Toxic Substance Control Act (TSCA), Title II.*

BUILDING INSPECTOR

Course Date: September 20, 2017
Certificate No.: R17-1661-AI-CO
No. of Hours: 4
Expiration Date: September 20, 2018
Certification not valid without watermark

A handwritten signature in black ink that reads "Frank Hulce".

Frank Hulce - Instructor

A handwritten signature in black ink that reads "Danaya Benedetto".

Danaya Benedetto- Training Program Manager



Colorado Department
of Public Health
and Environment

LEAD-BASED PAINT CERTIFICATION*

This certifies that

Richard L. Ralston

Certification No.: 9130

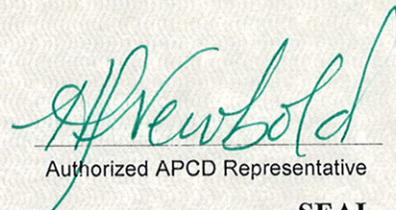
has met the requirements of 25-7-1104, C.R.S. and Air Quality Control
Commission Regulation No. 19, and is hereby certified by the state of
Colorado in the following discipline:

Risk Assessor*

Issued: February 10, 2017

Expires: February 10, 2019

** This certificate is valid only with the possession of a valid
lead-based paint training certificate in the discipline specified
above, issued by either a Colorado approved training provider,
an EPA approved training provider, or a training provider
approved by another EPA authorized program.*


Authorized APCD Representative

SEAL



1775 West 55th Avenue
Denver, CO 80221
303.410.4941
trainingchc.com



Certifies that

Richard Ralston

Has successfully completed the required training hours and passed the examination required by the Colorado Department of Public Health and Environment for:

Lead-Based Paint Risk Assessor Refresher

For the purposes of accreditation under the Colorado Department of Public Health and Environment Regulation No. 19 and other standard developed by EPA pursuant to Title IV of TSCA

Course Date: April 6, 2016
Certificate No.: R16-031-LRA-CO
No. of Hours: 8
Expiration Date: April 6, 2019

Certification not valid without watermark

Luis E. Peon

Luis Peon - Instructor

Danaya Benedetto

Danaya Benedetto - Training Program Manager

United States Department of Commerce
National Institute of Standards and Technology



Certificate of Accreditation to ISO/IEC 17025:2005

NVLAP LAB CODE: 200828-0

EMSL Analytical, Inc.
Denver, CO

*is accredited by the National Voluntary Laboratory Accreditation Program for specific services,
listed on the Scope of Accreditation, for:*

Asbestos Fiber Analysis

*This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005.
This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality
management system (refer to joint ISO-ILAC-IAF Communiqué dated January 2009).*

2018-04-01 through 2019-03-31

Effective Dates




For the National Voluntary Laboratory Accreditation Program



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

EMSL Analytical, Inc.

1010 Yuma Street
Denver, CO 80204
Ms. Amanda Lang
Phone: 303-740-5700
Email: alang@emsl.com
<http://www.emsl.com>

ASBESTOS FIBER ANALYSIS

NVLAP LAB CODE 200828-0

Bulk Asbestos Analysis

<u>Code</u>	<u>Description</u>
18/A01	EPA -- 40 CFR Appendix E to Subpart E of Part 763, Interim Method of the Determination of Asbestos in Bulk Insulation Samples
18/A03	EPA 600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials

Airborne Asbestos Analysis

<u>Code</u>	<u>Description</u>
18/A02	U.S. EPA's "Interim Transmission Electron Microscopy Analytical Methods-Mandatory and Nonmandatory-and Mandatory Section to Determine Completion of Response Actions" as found in 40 CFR, Part 763, Subpart E, Appendix A.

A handwritten signature in black ink, appearing to read "Dana S. Laman".

For the National Voluntary Laboratory Accreditation Program



AIHA Laboratory Accreditation Programs, LLC

acknowledges that

EMSL Analytical, Inc.

200 Route 130 North, Cinnaminson, NJ 08077

Laboratory ID: 100194

along with all premises from which key activities are performed, as listed above, has fulfilled the requirements of the AIHA Laboratory Accreditation Programs (AIHA-LAP), LLC accreditation to the ISO/IEC 17025:2005 international standard, *General Requirements for the Competence of Testing and Calibration Laboratories* in the following:

LABORATORY ACCREDITATION PROGRAMS

- | | |
|---|---|
| <input checked="" type="checkbox"/> INDUSTRIAL HYGIENE | Accreditation Expires: September 01, 2018 |
| <input checked="" type="checkbox"/> ENVIRONMENTAL LEAD | Accreditation Expires: September 01, 2018 |
| <input checked="" type="checkbox"/> ENVIRONMENTAL MICROBIOLOGY | Accreditation Expires: September 01, 2018 |
| <input type="checkbox"/> FOOD | Accreditation Expires: |
| <input type="checkbox"/> UNIQUE SCOPES | Accreditation Expires: |

Specific Field(s) of Testing (FoT)/Method(s) within each Accreditation Program for which the above named laboratory maintains accreditation is outlined on the attached **Scope of Accreditation**. Continued accreditation is contingent upon successful on-going compliance with ISO/IEC 17025:2005 and AIHA-LAP, LLC requirements. This certificate is not valid without the attached **Scope of Accreditation**. Please review the AIHA-LAP, LLC website (www.aihaaccreditedlabs.org) for the most current Scope.

William Walsh, CIH
Chairperson, Analytical Accreditation Board

Cheryl O. Morton
Managing Director, AIHA Laboratory Accreditation Programs, LLC

Revision 15: 03/30/2016

Date Issued: 08/31/2016



AIHA Laboratory Accreditation Programs, LLC SCOPE OF ACCREDITATION

EMSL Analytical, Inc.

200 Route 130 North, Cinnaminson, NJ 08077

Laboratory ID: **100194**

Issue Date: 08/31/2016

The laboratory is approved for those specific field(s) of testing/methods listed in the table below. Clients are urged to verify the laboratory's current accreditation status for the particular field(s) of testing/Methods, since these can change due to proficiency status, suspension and/or withdrawal of accreditation.

The EPA recognizes the AIHA-LAP, LLC ELLAP program as meeting the requirements of the National Lead Laboratory Accreditation Program (NLLAP) established under Title X of the Residential Lead-Based Paint Hazard Reduction Act of 1992 and includes paint, soil and dust wipe analysis. Air analysis is not included as part of the NLLAP.

Environmental Lead Laboratory Accreditation Program (ELLAP)

Initial Accreditation Date: 01/18/1995

Field of Testing (FoT)	Technology sub-type/ Detector	Method	Method Description <i>(for internal methods only)</i>
Paint		EPA SW-846 3050B	
		EPA SW-846 7000B	
Soil		EPA SW-846 3050B	
		EPA SW-846 7000B	
Settled Dust by Wipe		EPA SW-846 3050B	
		EPA SW-846 7000B	
Airborne Dust		NIOSH 7082	
Composited Wipes		EPA SW-846 3050B	
		EPA SW-846 7000B	

A complete listing of currently accredited Environmental Lead laboratories is available on the AIHA-LAP, LLC website at: <http://www.aihaaccreditedlabs.org>

B

POSITIVE LEAD SAMPLE
MATERIAL PHOTOGRAPHS





Blue - LCP

Sample Represented –
CCD-MR-1L

C

LABORATORY RESULTS &
CHAIN OF CUSTODY-
ASBESTOS





EMSL Analytical, Inc.

1010 Yuma Street Denver, CO 80204
Tel/Fax: (303) 740-5700 / (303) 741-1400
<http://www.EMSL.com> / denverlab@emsl.com

EMSL Order: 221805088
Customer ID: ALLP62
Customer PO:
Project ID:

Attention: Logan Greenfield
All-Phase Environmental Consultants, Inc
721 West 9th Street
Pueblo, CO 81003
Phone: (719) 250-0036
Fax: (719) 542-2807
Received Date: 07/06/2018 10:10 AM
Analysis Date: 07/11/2018
Collected Date: 06/29/2018
Project: 18-3066-CDot-A-CCD Pump

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
CCDPH-1A 221805088-0001	Window Glazing	Brown/Variou Non-Fibrou Homogeneous		100% Non-fibrous (Other)	<1% Chrysotile
CCDPH-1B 221805088-0002	Window Glazing	Brown/Variou Non-Fibrou Homogeneous		100% Non-fibrous (Other)	<1% Chrysotile
CCDPH-1C 221805088-0003	Window Glazing	Gray Non-Fibrou Heterogeneous		100% Non-fibrous (Other)	<1% Chrysotile
Inseparable paint / coating layer included in analysis					
CCDPH-2A 221805088-0004	Concrete/Paint	Gray/Variou Non-Fibrou Heterogeneous		100% Non-fibrous (Other)	None Detected
Inseparable paint / coating layer included in analysis					
CCDPH-2B 221805088-0005	Concrete/Paint	Gray/Variou Non-Fibrou Heterogeneous		100% Non-fibrous (Other)	None Detected
Inseparable paint / coating layer included in analysis					
CCDPH-2C 221805088-0006	Concrete/Paint	Gray/Variou Non-Fibrou Heterogeneous		100% Non-fibrous (Other)	None Detected
Inseparable paint / coating layer included in analysis					
CCDPH-3A-Caulk 221805088-0007	Roofing	White Non-Fibrou Homogeneous		100% Non-fibrous (Other)	None Detected
CCDPH-3A-Felt 221805088-0007A	Roofing	Brown Non-Fibrou Homogeneous	30% Synthetic	70% Non-fibrous (Other)	None Detected
CCDPH-3B-Caulk 221805088-0008	Roofing	White Non-Fibrou Homogeneous		100% Non-fibrous (Other)	None Detected

EMSL maintains liability limited to cost of analysis. The above analyses were performed in general compliance with Appendix E to Subpart E of 40 CFR (previously EPA 600/M4-82-020 "Interim Method"), but augmented with procedures outlined in the 1993 ("final") version of the method. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. All samples received in acceptable condition unless otherwise noted. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. EMSL recommends gravimetric reduction for all non-friable organically bound materials prior to analysis. Estimation of uncertainty is available on request.

Initial report from: 07/11/2018 17:08:31



EMSL Analytical, Inc.

1010 Yuma Street Denver, CO 80204
Tel/Fax: (303) 740-5700 / (303) 741-1400
<http://www.EMSL.com> / denverlab@emsl.com

EMSL Order: 221805088
Customer ID: ALLP62
Customer PO:
Project ID:

Attention: Logan Greenfield
All-Phase Environmental Consultants, Inc
721 West 9th Street
Pueblo, CO 81003
Phone: (719) 250-0036
Fax: (719) 542-2807
Received Date: 07/06/2018 10:10 AM
Analysis Date: 07/11/2018
Collected Date: 06/29/2018
Project: 18-3066-CDot-A-CCD Pump

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
CCDPH-3B-Felt 221805088-0008A	Roofing	Brown Non-Fibrous Homogeneous	30% Synthetic	70% Non-fibrous (Other)	None Detected
CCDPH-3C-Caulk 221805088-0009	Roofing	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
CCDPH-3C-Felt 221805088-0009A	Roofing	White Fibrous Homogeneous	30% Synthetic	70% Non-fibrous (Other)	None Detected
CCDPH-3Q-Caulk 221805088-0010	Roofing	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
CCDPH-3Q-Felt 221805088-0010A	Roofing	White Fibrous Homogeneous	30% Synthetic	70% Non-fibrous (Other)	None Detected

EMSL maintains liability limited to cost of analysis. The above analyses were performed in general compliance with Appendix E to Subpart E of 40 CFR (previously EPA 600/M4-82-020 "Interim Method"), but augmented with procedures outlined in the 1993 ("final") version of the method. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. All samples received in acceptable condition unless otherwise noted. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. EMSL recommends gravimetric reduction for all non-friable organically bound materials prior to analysis. Estimation of uncertainty is available on request.

Initial report from: 07/11/2018 17:08:31



EMSL Analytical, Inc.

1010 Yuma Street Denver, CO 80204
Tel/Fax: (303) 740-5700 / (303) 741-1400
<http://www.EMSL.com> / denverlab@emsl.com

EMSL Order: 221805088
Customer ID: ALLP62
Customer PO:
Project ID:

Attention: Logan Greenfield
All-Phase Environmental Consultants, Inc
721 West 9th Street
Pueblo, CO 81003
Project: 18-3066-CDot-A-CCD Pump

Phone: (719) 250-0036
Fax: (719) 542-2807
Received Date: 07/06/2018 10:10 AM
Analysis Date: 07/11/2018
Collected Date: 06/29/2018

The samples in this report were submitted to EMSL for analysis by Asbestos Analysis of Bulk materials via EPA/600 (0513) Method using Polarized Light Microscopy. The reference number for these samples is the EMSL Order ID above. Please use this reference number when calling about these samples.

Report Comments:

Sample Receipt Date: 07/06/2018 Sample Receipt Time: 10:10 AM
Analysis Completed Date: 07/11/2018 Analysis Completed Time: 4:52 PM

Analyst(s):

Cassandra Schorzman PLM (8)

Gentry Catlett PLM (6)

Samples Reviewed and approved by:

Amanda Lang, Asbestos Laboratory Manager
or other approved signatory

EMSL maintains liability limited to cost of analysis. The above analyses were performed in general compliance with Appendix E to Subpart E of 40 CFR (previously EPA 600/M4-82-020 "Interim Method"), but augmented with procedures outlined in the 1993 ("final") version of the method. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. All samples received in acceptable condition unless otherwise noted. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. EMSL recommends gravimetric reduction for all non-friable organically bound materials prior to analysis. Estimation of uncertainty is available on request.

Initial report from: 07/11/2018 17:08:31

7/11



Asbestos Chain of Custody

EMSL Order Number (Lab Use Only):

221805088

Denver, CO 80204
PHONE: (303) 740-5700
FAX: (303) 741-1400

EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

Company: All-Phase Environmental Consultants, Inc.		EMSL-Bill to: <input type="checkbox"/> Different <input checked="" type="checkbox"/> Same <small>If Bill to is Different note instructions in Comments**</small>	
Street: 721 W. 9th Street		Third Party Billing requires written authorization from third party	
City: Pueblo	State/Province: CO	Zip/Postal Code: 81003	Country: United States
Report To (Name): Logan Greenfield		Telephone #: 719-250-0036	
Email Address: logan@allphaseenvironmental.com		Fax #:	Purchase Order:
Project Name/Number: 18-3066-CDDT-A-CCD Pump		Please Provide Results: <input type="checkbox"/> FAX <input checked="" type="checkbox"/> E-mail <input type="checkbox"/> Mail	
U.S. State Samples Taken: CO		Connecticut Samples: <input type="checkbox"/> Commercial <input type="checkbox"/> Residential	

Turnaround Time (TAT) Options* - Please Check

3 Hour 6 Hour 24 Hour 48 Hour 72 Hour 96 Hour 1 Week 2 Week

*For TEM Air 3 hr through 6 hr, please call ahead to schedule. There is a premium charge for 3 Hour TEM AHERA or EPA Level II TAT. You will be asked to sign an authorization form for this service. Analysis completed in accordance with EMSL's Terms and Conditions located in the Analytical Price Guide.

PCM - Air <input type="checkbox"/> Check if samples are from NY <input type="checkbox"/> NIOSH 7400 <input type="checkbox"/> w/ OSHA 8hr. TWA	TEM - Air <input type="checkbox"/> 4-4.5hr TAT (AHERA only) <input type="checkbox"/> AHERA 40 CFR, Part 763 <input type="checkbox"/> NIOSH 7402 <input type="checkbox"/> EPA Level II <input type="checkbox"/> ISO 10312	TEM - Dust <input type="checkbox"/> Microvac - ASTM D 5755 <input type="checkbox"/> Wipe - ASTM D6480 <input type="checkbox"/> Carpet Sonication (EPA 600/J-93/167)
PLM - Bulk (reporting limit) <input checked="" type="checkbox"/> PLM EPA 600/R-93/116 (<1%) <input type="checkbox"/> PLM EPA NOB (<1%) Point Count <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%) Point Count w/Gravimetric <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%) <input type="checkbox"/> NYS 198.1 (friable in NY) <input type="checkbox"/> NYS 198.6 NOB (non-friable-NY) <input type="checkbox"/> NIOSH 9002 (<1%)	TEM - Bulk <input type="checkbox"/> TEM EPA NOB <input type="checkbox"/> NYS NOB 198.4 (non-friable-NY) <input type="checkbox"/> Chatfield SOP <input type="checkbox"/> TEM Mass Analysis-EPA 600 sec. 2.5 TEM - Water: EPA 100.2 Fibers >10µm <input type="checkbox"/> Waste <input type="checkbox"/> Drinking All Fiber Sizes <input type="checkbox"/> Waste <input type="checkbox"/> Drinking	Soil/Rock/Vermiculite <input type="checkbox"/> PLM CARB 435 - A (0.25% sensitivity) <input type="checkbox"/> PLM CARB 435 - B (0.1% sensitivity) <input type="checkbox"/> TEM CARB 435 - B (0.1% sensitivity) <input type="checkbox"/> TEM CARB 435 - C (0.01% sensitivity) <input type="checkbox"/> TEM Qual. via Filtration Technique <input type="checkbox"/> TEM Qual. via Drop-Mount Technique Other: <input type="checkbox"/>

Check For Positive Stop - Clearly Identify Homogenous Group

Filter Pore Size (Air Samples): 0.8µm 0.45µm

Samplers Name: Logan Greenfield

Samplers Signature: *[Signature]*

Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
CCDPH-1A	Window Glazing	---	6-29-18
CCDPH-1B	↓	---	↓
CCDPH-1C		---	
CCDPH-2A		---	
CCDPH-2B	Concrete / Paint	---	↓
CCDPH-2C	↓	---	
CCDPH-3A	Roofing	---	
CCDPH-3B	↓	---	

Client Sample # (s): _____ Total # of Samples: 10

Relinquished (Client): *[Signature]* Date: 7-2-18 Time: 5:45

Received (Lab): *[Signature]* Date: 7/6/18 Time: 10:10AM

Comments/Special Instructions: called client about delay 7-2-18. E-File 7955 0254 5065

2/5



EMSL ANALYTICAL, INC.
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Asbestos Chain of Custody

EMSL Order Number *(Lab Use Only)*:

Denver, CO 80204
PHONE: (303) 740-5700
FAX: (303) 741-1400

Additional Pages of the Chain of Custody are only necessary if needed for additional sample information

Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
CCDPH-3C	Roofing	—	6-29-18
CCDPH-3Q	↓	—	↓
*Comments/Special Instructions:			



EMSL Analytical, Inc.

1010 Yuma Street, Denver, CO 80204
Phone/Fax: (303) 740-5700 / (303) 741-1400
<http://www.EMSL.com> denverlab@emsl.com

EMSL Order: 221805088
CustomerID: ALLP62
CustomerPO:
ProjectID:

Attn: **Logan Greenfield**
All-Phase Environmental Consultants, Inc
721 West 9th Street
Pueblo, CO 81003

Phone: (719) 545-0375
Fax: (719) 542-2807
Received: 07/06/18 10:10 AM
Analysis Date: 7/25/2018
Collected: 6/29/2018

Project: **18-3066-CDot-A-CCD Pump**

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy. Quantitation using 400 Point Count Procedure

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
CCDPH-1A <i>221805088-0001</i>	Window Glazing	Brown/Variou Non-Fibrou Homogeneous		99.75% Non-fibrous (other)	0.25% Chrysotile
CCDPH-1B <i>221805088-0002</i>	Window Glazing	Brown/Variou Non-Fibrou Homogeneous		100.00% Non-fibrous (other)	<0.25% Chrysotile
CCDPH-1C <i>221805088-0003</i>	Window Glazing	Gray Non-Fibrou Homogeneous		99.75% Non-fibrous (other)	0.25% Chrysotile

Disclaimer:Some samples may contain asbestos fibers present in dimensions below PLM resolution limits. The limit of detection as stated in the method is 0.25%. EMSL Analytical Inc suggests that samples reported as <0.25% or none detected undergo additional analysis via TEM. The above test report relates only to the items tested. This report may not be reproduced, except in full, without written approval of EMSL Analytical Inc. This test report must not be used by the client to claim product endorsement by NVLAP or any agency of the United States Government. EMSL Analytical Inc., bears no responsibility for sample collection activities, analytical method limitations, or the accuracy of results when requested to separate layered samples. EMSL Analytical Inc., liability is limited to the cost of sample analysis. The test results contained within this report meet the requirements of NELAC unless otherwise noted. Samples received in good condition unless otherwise noted. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample.
Samples analyzed by EMSL Analytical, Inc. Denver, CO NVLAP Lab Code 200828-0

Initial report from 07/25/2018 17:19:55



EMSL Analytical, Inc.

1010 Yuma Street, Denver, CO 80204
Phone/Fax: (303) 740-5700 / (303) 741-1400
<http://www.EMSL.com> denverlab@emsl.com

EMSL Order: 221805088
CustomerID: ALLP62
CustomerPO:
ProjectID:

Attn: **Logan Greenfield**
All-Phase Environmental Consultants, Inc
721 West 9th Street
Pueblo, CO 81003

Phone: (719) 545-0375
Fax: (719) 542-2807
Received: 07/06/18 10:10 AM
Analysis Date: 7/25/2018
Collected: 6/29/2018

Project: **18-3066-CDot-A-CCD Pump**

The samples in this report were submitted to EMSL for analysis by Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy. Quantitation using 400 Point Count Procedure. The reference number for these samples is the EMSL Order ID above. Please use this reference number when calling about these samples.

Report Comments:

Sample Receipt Date:: 7/6/2018 Sample Receipt Time: 10:10 AM
Analysis Completed Date: 7/25/2018 Analysis Completed Time: 5:15 PM

Analyst(s):

Timothy Kleehammer PLM 400 Point Count (3)

Samples reviewed and approved by:

Amanda Lang, Asbestos Laboratory Manager
or other approved signatory

Disclaimer: Some samples may contain asbestos fibers present in dimensions below PLM resolution limits. The limit of detection as stated in the method is 0.25%. EMSL Analytical Inc suggests that samples reported as <0.25% or none detected undergo additional analysis via TEM. The above test report relates only to the items tested. This report may not be reproduced, except in full, without written approval of EMSL Analytical Inc. This test report must not be used by the client to claim product endorsement by NVLAP or any agency of the United States Government. EMSL Analytical Inc., bears no responsibility for sample collection activities, analytical method limitations, or the accuracy of results when requested to separate layered samples. EMSL Analytical Inc., liability is limited to the cost of sample analysis. The test results contained within this report meet the requirements of NELAC unless otherwise noted. Samples received in good condition unless otherwise noted. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample.
Samples analyzed by EMSL Analytical, Inc. Denver, CO NVLAP Lab Code 200828-0

Initial report from 07/25/2018 17:19:55

D

LABORATORY RESULTS &
CHAIN OF CUSTODY -
LEAD & TCLP





EMSL Analytical, Inc.

200 Route 130 North, Cinnaminson, NJ 08077

Phone/Fax: (856) 303-2500 / (856) 786-5974

<http://www.EMSL.com>

cinnaminsonleadlab@emsl.com

EMSL Order:	201807359
CustomerID:	ALLP62
CustomerPO:	
ProjectID:	

Attn: **Richard Ralston**
All-Phase Environmental Consultants, Inc
721 West 9th Street
Pueblo, CO

Phone: (719) 225-6953
 Fax: (719) 542-2807
 Received: 07/09/18 10:00 AM
 Collected: 6/28/2018

Project: 18-3066-C70-L-AP-CCD / Pump H

Test Report: Lead in Paint Chips by Flame AAS (SW 846 3050B/7000B)*

<i>Client Sample Description</i>	<i>Lab ID</i>	<i>Collected</i>	<i>Analyzed</i>	<i>Weight</i>	<i>Lead Concentration</i>
CCD-MR-1L Site: Pipe In Main Room - Blue	201807359-0001	6/28/2018	7/11/2018	0.2519 g	0.26 % wt
CCD-MR-2L Site: Door & Trim Wood - Gray	201807359-0002	6/28/2018	7/11/2018	0.2572 g	0.040 % wt
CCD-MR-3L Site: Ceiling - Tan	201807359-0003	6/28/2018	7/11/2018	0.2516 g	0.012 % wt
CCD-MR-4L Site: Roof Parapet Wall - White	201807359-0004	6/28/2018	7/11/2018	0.2541 g	<0.0080 % wt
CCD-MR-5L Site: Electrical Boxes - Green	201807359-0005	6/28/2018	7/11/2018	0.2575 g	0.025 % wt
CCD-MR-6L Site: Side of Build Ex (N) - Fawn	201807359-0006	6/28/2018	7/11/2018	0.2518 g	0.027 % wt
CCD-MR-7L Site: Elec Box (5) Side - Aqua	201807359-0007	6/28/2018	7/11/2018	0.0707 g	<0.028 % wt

Phillip Worby, Lead Laboratory Manager
or other approved signatory

*Analysis following Lead in Paint by EMSL SOP/Determination of Environmental Lead by FLAA. Reporting limit is 0.008 % wt based on the minimum sample weight per our SOP. Unless noted, results in this report are not blank corrected. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities. Samples received in good condition unless otherwise noted. "<" (less than) result signifies that the analyte was not detected at or above the reporting limit. Measurement of uncertainty is available upon request. The QC data associated with the sample results included in this report meet the recovery and precision requirements unless specifically indicated otherwise. Definitions of modifications are available upon request.

Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ NELAP Certifications: NJ 03036, NY 10872, PA 68-00367, AIHA-LAP, LLC ELLAP 100194, A2LA 2845.01

Initial report from 07/12/2018 10:38:07



EMSL ANALYTICAL, INC.
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Lead (Pb) Chain of Custody

EMSL Order ID (Lab Use Only):

201807359

Company : All-Phase Environmental Consultants, Inc		EMSL-Bill to: <input checked="" type="checkbox"/> Same <input type="checkbox"/> Different If Bill to is Different note instructions in Comments**	
Street: 721 West 9th Street		Third Party Billing requires written authorization from third party	
City: Pueblo	State/Province: CO	Zip/Postal Code: 81003	Country: US
Report To (Name): Richard Ralston		Telephone #: 7192256953	
Email Address: rick@allphaseenvironmental.com		Fax #: 719-542-2807	Purchase Order:
Project Name/Number: 18-3066-C70-L-AP- <u>CCD Pump H</u>		Please Provide Results: <input type="checkbox"/> Fax <input checked="" type="checkbox"/> Email	
U.S. State Samples Taken: CO		CT Samples: <input type="checkbox"/> Commercial/Taxable <input type="checkbox"/> Residential/Tax Exempt	

Turnaround Time (TAT) Options* - Please Check

3 Hour
 6 Hour
 24 Hour
 48 Hour
 72 Hour
 96 Hour
 1 Week
 2 Week

*Analysis completed in accordance with EMSL's Terms and Conditions located in the Price Guide

Matrix	Method	Instrument	Reporting Limit	Check
Chips <input checked="" type="checkbox"/> % by wt. <input type="checkbox"/> mg/cm ² <input type="checkbox"/> ppm (mg/kg)	SW846-7000B	Flame Atomic Absorption	0.01%	<input type="checkbox"/>
Air	NIOSH 7082	Flame Atomic Absorption	4 µg/filter	<input type="checkbox"/>
	NIOSH 7105	Graphite Furnace AA	0.03 µg/filter	<input type="checkbox"/>
	NIOSH 7300M/NIOSH 7303	ICP-OES	0.5 µg/filter	<input type="checkbox"/>
Wipe* ASTM <input type="checkbox"/> non ASTM <input type="checkbox"/> <small>*if no box checked, non-ASTM Wipe assumed</small>	SW846-7000B	Flame Atomic Absorption	10 µg/wipe	<input type="checkbox"/>
	SW846-6010B or C	ICP-OES	1.0 µg/wipe	<input type="checkbox"/>
TCLP	SW846-1311/7000B/SM 3111B	Flame Atomic Absorption	0.4 mg/L (ppm)	<input type="checkbox"/>
	SW846-1311/SW846-6010B or C	ICP-OES	0.1 mg/L (ppm)	<input type="checkbox"/>
SPLP	SW846-1312/7000B/SM 3111B	Flame Atomic Absorption	0.4 mg/L (ppm)	<input type="checkbox"/>
	SW846-1312/SW846-6010B or C	ICP-OES	0.1 mg/L (ppm)	<input type="checkbox"/>
TTLC	22 CCR App. II, 7000B/7420	Flame Atomic Absorption	40 mg/kg (ppm)	<input type="checkbox"/>
	22 CCR App. II, SW846-6010B or C	ICP-OES	2 mg/kg (ppm)	<input type="checkbox"/>
STLC	22 CCR App. II, 7000B/7420	Flame Atomic Absorption	0.4 mg/L (ppm)	<input type="checkbox"/>
	22 CCR App. II, SW846-6010B or C	ICP-OES	0.1 mg/L (ppm)	<input type="checkbox"/>
Soil	SW846-7000B	Flame Atomic Absorption	40 mg/kg (ppm)	<input type="checkbox"/>
	SW846-6010B or C	ICP-OES	2 mg/kg (ppm)	<input type="checkbox"/>
Wastewater Unpreserved <input type="checkbox"/> Preserved with HNO ₃ pH < 2 <input type="checkbox"/>	SM3111B/SW846-7000B	Flame Atomic Absorption	0.4 mg/L (ppm)	<input type="checkbox"/>
	EPA 200.9	Graphite Furnace AA	0.003 mg/L (ppm)	<input type="checkbox"/>
	EPA 200.7	ICP-OES	0.020 mg/L (ppm)	<input type="checkbox"/>
Drinking Water Unpreserved <input type="checkbox"/> Preserved with HNO ₃ pH < 2 <input type="checkbox"/>	EPA 200.8	ICP-MS	0.001 mg/L (ppm)	<input type="checkbox"/>
	EPA 200.9	Graphite Furnace AA	0.003 mg/L (ppm)	<input type="checkbox"/>
	EPA 200.5	ICP-OES	0.003 mg/L (ppm)	<input type="checkbox"/>
TSP/SPM Filter	40 CFR Part 50	ICP-OES	12 µg/filter	<input type="checkbox"/>
	40 CFR Part 50	Graphite Furnace AA	3.6 µg/filter	<input type="checkbox"/>
Other:				<input type="checkbox"/>

Name of Sampler: Rick Ralston Signature of Sampler: Richard Ralston

Sample #	Location	Volume/Area	Date/Time Sampled
1 2 CCD-me-1L	Pipe IN MAIN ROOM	BLUE	8/28/2018
CCD-me-2L	DOOR + TRIM wood	GRAY	

Client Sample #s: - Total # of Samples: 7

Relinquished (Client): Ralston Date: 7/8/2018 Time: 450

Received (Lab): by Date: 7/9/18 Time: 10 A EST

Comments:
Bill To: All-Phase Environmental Consultants, Inc, 721 West 9th Street, Pueblo, CO, 81003, US
Attention: Brandice Eslinger Phone: 719-240-4690 Email: brandice@allphaseenvironmental.com Purchase Order.



EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

Chain of Custody

EMSL Order Number (Lab Use Only)

201807359

PHONE:
FAX:

Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
3	CCD - MR-3L TAN Ceiling	TAN	6-28-18
4	CCD - MR-4L Roof Perimeter wall	white	↓
5	CCD - MR-5L Electrical boxes	Green	
6	CCD - MR-6L Roof Side of Buid. Et (N)	PSWD	
7	CCD - MR-7L Roof Elec box (S) Side	NGUN	
/			

*Comments/Special Instructions:

Analysis Completed in Accordance with EMSL's Terms and Conditions located in the Analytical Price Guide



EMSL Analytical, Inc.

200 Route 130 North, Cinnaminson, NJ 08077

Phone/Fax: (856) 303-2500 / (856) 786-5974

<http://www.EMSL.com>

cinnaminsonleadlab@emsl.com

EMSL Order:	201807356
CustomerID:	ALLP62
CustomerPO:	
ProjectID:	

Attn: **Rick Ralston**
All-Phase Environmental Consultants, Inc
721 West 9th Street
Pueblo, CO 81003

Phone: (719) 545-0375
 Fax: (719) 542-2807
 Received: 07/09/18 10:00 AM
 Collected: 6/28/2018

Project: 18-3066-CDOT-T-CCD Pump

Test Report: Toxicity Characteristic Leachate Procedure (1311/7000B)

<i>Client Sample Description</i>	<i>Lab ID</i>	<i>Collected</i>	<i>Analyzed</i>	<i>Lead Concentration</i>
CCD-Pump-1	201807356-0001	6/28/2018	7/11/2018	2.9 mg/L
Site: Entire Building				

Phillip Worby, Lead Laboratory Manager
or other approved signatory

Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ NELAP Certifications: NJ 03036, NY 10872, PA 68-00367

Initial report from 07/12/2018 15:45:04



EMSL ANALYTICAL, INC.
LABORATORY PRODUCTS TRAINING

Chain of Custody
EMSL Order Number (Lab Use Only)

201807356

EMSL
200 Route 130 North
CINDAMINSON NJ 08077
PHONE (800) 220-3675
FAX (456) 658-3502

PHONE:
FAX:

Company: All Phase Environmental Consultants, Inc		EMSL-Bill to: <input checked="" type="checkbox"/> Same <input type="checkbox"/> Different If Bill to is Different note instructions in Comments**	
Street: 721 9th Street		Third Party Billing requires written authorization from third party	
City: Pueblo	State/Province: CO	Zip/Postal Code:	Country:
Report To (Name): Richard Racso		Telephone #:	
Email Address: Rick@allphaseenviro.com		Purchase Order:	
Project Name/Number: 18-3066-CDOT-T-SCD Pump		Please Provide Results: <input type="checkbox"/> Fax <input type="checkbox"/> Email <input type="checkbox"/> Mail	
U.S. State Samples Taken: Colorado		Connecticut Samples: <input type="checkbox"/> Commercial <input type="checkbox"/> Residential	

Turnaround Time (TAT) Options* - Please Check

3 Hour 6 Hour 24 Hour 48 Hour 72 Hour 96 Hour 1 Week 2 Week

*For RUSH TAT's Please Call Ahead to Confirm Lab Hours and Availability. Not all TAT options are valid for every test. Materials Science and IAQ TATs are in Business Days rather than Hours (i.e. 24 Hour = End of Next Business Day)

Asbestos

PCM - Air <input type="checkbox"/> NIOSH 7400 w/ 8hr TWA TEM - Air <input type="checkbox"/> 4-4.5hr TAT (AHERA ONLY) <input type="checkbox"/> AHERA 40 CFR, Part 763 <input type="checkbox"/> NIOSH 7402 <input type="checkbox"/> EPA Level II <input type="checkbox"/> ISO 10312 TEM - Water Fibers >10µm <input type="checkbox"/> Waste <input type="checkbox"/> Drinking All Fiber Sizes <input type="checkbox"/> Waste <input type="checkbox"/> Drinking	PLM - Bulk <input type="checkbox"/> PLM EPA 600/R-93/116 <input type="checkbox"/> PLM EPA NOB (<1%) <input type="checkbox"/> NYS 198.1 (friable-NY) <input type="checkbox"/> NYS 198.6 (non-friable-NY) Point Count <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%) Point Count w/ Gravimetric <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%) TEM - Dust <input type="checkbox"/> Microvac - ASTM D 5755 <input type="checkbox"/> Wipe-ASTM D6480	TEM - Bulk <input type="checkbox"/> TEM EPA NOB <input type="checkbox"/> NYS NOB 198.4 (non-friable-NY) <input type="checkbox"/> Chatfield SOP Soil/Rock/Vermiculite <input type="checkbox"/> PLM CARB 435 - A (0.25% sensitivity) <input type="checkbox"/> PLM CARB 435 - B (0.1% sensitivity) <input type="checkbox"/> TEM CARB 435 - B (0.1% sensitivity) <input type="checkbox"/> EPA Reg. 1 Screening Protocol (Qualitative) Other:
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Lead (Pb)

Flame Atomic Absorption <input type="checkbox"/> Chips SW846-7000B or AOAC 974.02 <input type="checkbox"/> Soil SW846-7000B/7420 <input type="checkbox"/> Air NIOSH 7082 <input type="checkbox"/> Wastewater SM3111B or SW846-7000B/7420 <input type="checkbox"/> ASTM Wipe SW846-7000B/7420 <input type="checkbox"/> Non ASTM Wipe SW846-7000B/7420 <input checked="" type="checkbox"/> TCLP SW846-1311/7420/SM 3111B	ICP <input type="checkbox"/> Air NIOSH 7300 Modified <input type="checkbox"/> Non ASTM Wipe SW846-6010B or C <input type="checkbox"/> ASTM Wipe SW846-6010B or C <input type="checkbox"/> Soil SW846-6010 B or C <input type="checkbox"/> Waste Water SW846-6010B or C <input type="checkbox"/> TCLP SW846-6010B or C	Graphite Furnace Atomic Absorption <input type="checkbox"/> Soil SW846-7421 <input type="checkbox"/> Wastewater EPA 200.9 <input type="checkbox"/> Air NIOSH 7105 <input type="checkbox"/> Drinking Water EPA 200.9 Other:
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Materials Science

Common Particle ID (large particles)
 Full Particle ID (environmental dust)
 Basic Material ID (solids)
 Advanced Material ID
 Physical Testing (Tensile, Compression)
 Combustion-by-products (soot, char, etc.)
 X-Ray Fluorescence (elem. analysis)
 X-Ray Diffraction (Crystalline Part.)
 MMVF's (Fibrous glass, RCF's)
 Particle Size (sieve/microscopy/laser)
 Combustible Dust
 Petrographic Examination
Other:

Microbiology

Wipe and Bulk Samples <input type="checkbox"/> Mold & Fungi - Direct Examination <input type="checkbox"/> Mold & Fungi Culture (Genus Only) <input type="checkbox"/> Mold & Fungi Culture (Genus & Species) <input type="checkbox"/> Bacterial Count & ID (Up to Three Types) <input type="checkbox"/> Bacterial Count & ID (Up to Five Types) <input type="checkbox"/> MRSA <input type="checkbox"/> Pseudomonas aeruginosa Water Samples <input type="checkbox"/> Total Coliform & E.coli (P/A) <input type="checkbox"/> Fecal Coliform (SM 9222D) <input type="checkbox"/> Sewage Screen <input type="checkbox"/> Heterotrophic Plate Count (SM 9215)	Air Samples <input type="checkbox"/> Mold & Fungi (Spore Trap) <input type="checkbox"/> Mold & Fungi Culture (Genus Only) <input type="checkbox"/> Mold & Fungi (Genus & Species) <input type="checkbox"/> Bacterial Culture & ID (Up to Three Types) <input type="checkbox"/> Bacterial Culture & ID (Up to Five Types) <input type="checkbox"/> Endotoxin Testing Real Time Q-PCR (See Analytical Guide for Code) Code: Legionella <input type="checkbox"/> Level 1 <input type="checkbox"/> Level 2 <input type="checkbox"/> Level 3 <input type="checkbox"/> Level 4 Other:
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IAQ

Nuisance Dust NIOSH 0500 0600
 Airborne Dust PM10 TSP
 Silica Analysis: All Species
 Silica Analysis - Single Species
 Alpha Quartz Cristobalite Tridymite
 HVAC Efficiency
 Carbon Black
 Airborne Oil Mist
 Radon Testing: Call for Kit and COC
Other:

****Comments/Special Instructions:**

Client Sample #'s	-	Total # of Samples:	1
Relinquished (Client): Rhabston	Date: 7-4-18	Time: 500	
Received (Lab):	Date: 7/9/18	Time: 10 h 12 min	

Analysis Completed in Accordance with EMSL's Terms and Conditions located in the Analytical Price Guide

6. Materials Summary

December 27, 2018

Jenn Bradtmueller
 Kiewit Infrastructure Co.
 160 Inverness Drive West, Suite 110
 Englewood, CO 80112

RE: Pump House – Summary of Removed Materials

Dear Jenn,

Below is a summary of the materials removed from the Pump House. For more details regarding the location of the Non-Asbestos Containing Materials (Non-ACM) and the asbestos content please refer to the Table 3-1 of the All Phase Environmental SSAR (page 15).

Because the asbestos content was less than 1% in all materials, no manifest was required. The debris were taken as clean demolition debris to the ACM dumpster at AP-8. All other materials were left in place to be removed as part of the demolition which was performed by Kiewit.

Material Removed	Quantity
Window Glazing	12 SF

If you have any questions or require further information regarding these quantities, please contact me at 303-238-0207.

Sincerely,

JKS Industries, LLC



Jeffrey Knight
 President

7. Daily Logs

8. Truck Log

Adrian A. Maria Torres
OWNERS
 Certified-DBE
 M/WBE-SBE-
 EBE



INVOICE NO.
6038

Date:
11-5-18

6840 York St.
 Denver, CO 80229
 Fax: 303.936.0468

**Concrete, Asphalt, Sand
 and Gravel**

Cell: 303.564.6963
 303.915.6821

a_ahauling@yahoo.com

BILL TO: Kiewit

Address: 46th + York

Job No.: 103565

Truck Owner: _____

Truck Number: A07

Ton Mile _____ Load Count _____ Hourly Time In 7:00 Time Out 5:00 Total Hours 10

Ticket No.	Weight	Ticket No.	Weight
<u>7284209</u>			
<u>7284202</u>			
<u>7284325</u>			
<u>7284324</u>			

I, the customer, agree on the rate as above. This account is due payable not later than 30 days after the date of invoice. There will be an 18% annual late charge on overdue accounts.

LOCATION AND DESCRIPTION:
 FROM: Central I-70
 TO: DAD'S
 MATERIAL: Concrete

TOTAL TONS: _____
 TOTAL HOURS: _____
 LOAD CT: _____
 RATE: \$ _____
 AMOUNT DUE: \$ _____

**FILL OUT COMPLETELY
 MAKE OUT TICKET FOR EACH PROJECT**

White Copy: _____
 Yellow Copy: _____
 Pink Copy: _____
 Dispatcher: _____
 Driver: Juan Molina
 Project: SCA Patricia